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24 August 2023

55Mt increase in Ore Reserves to 214Mt

KEY POINTS

Ore Reserve update reinforces Pilbara Minerals' 100% owned Pilgangoora Operation as one of the largest hard-rock lithium deposits globally.
35% increase in total Proved and Probable Ore Reserve Tonnes and a 36% increase in the contained lithium oxide at Pilgangoora to 2.5 million tonnes (Mt) grading 1.19% Li_2O and 103 ppm Ta_2O_5.
Ore Reserve update is based on the updated Mineral Resource (released 7 August 2023) of 413.8Mt grading 1.15% Li_2O and 112ppm Ta_2O_5, containing 4.8Mt of lithium oxide and 102 million pounds of Ta_2O_5.
Updated Ore Reserve extends Pilgangoora Operation's mine life by circa 9 years to ~34 years[1];
The updated Ore Reserve is based on a long-term price of US$1,450 per tonne (t) of spodumene concentrate (SC6.0 CIF basis).
The updated Ore Reserve includes all results from Pilbara Minerals' FY23, 153-hole exploration and development drilling campaign testing down-dip extensions.
Additional extension targets have been identified including the prospective East Extension and Central Extension which are to be further drill tested during the planned FY24 drilling campaign.
Supported by the updated Ore Reserve, a study has commenced to explore further potential expansions in production capacity beyond P1000 at the Pilgangoora Operation.

Australian lithium producer, Pilbara Minerals Limited (**Pilbara Minerals or the Company –** ASX: PLS) is pleased to announce a substantial increase in Ore Reserves at its 100%-owned Pilgangoora Operation in Western Australia's Pilbara region, reinforcing its position as one of the world's largest hard-rock lithium operations.

The updated Ore Reserve, which represents a 35% increase in total Ore Reserves when compared with the 30 June 2022 Ore Reserve statement, now contains 2.5Mt of lithium oxide at 1.19% Li_2O.

Pilbara Minerals' Managing Director and CEO, Dale Henderson, said:

"*We are delighted to be updating the Pilgangoora Ore Reserve which incorporates the recent Mineral Resource update and results from the FY23 drilling campaign.*

"This increase in reserves allows us to materially extend our already long mine life at Pilgangoora and we have now commenced a study to explore further expansion of production capacity beyond P1000.

"We will continue to seek organic growth opportunities via exploration to maximise value for shareholders with additional drilling campaigns planned in FY24 and beyond to maximise the potential of our world class Pilgangoora Operation."

[1] The indicative mine life quoted is from 1 July 2023, based on the planned ramp up to a 6.3 Mtpa production capacity assuming successful delivery of the P1000 Expansion Project for the Pilgan Plant and based on the updated 30 June 2023 Ore Reserve comprising 9% Proved Ore Reserves and 91% Probable Ore Reserves.

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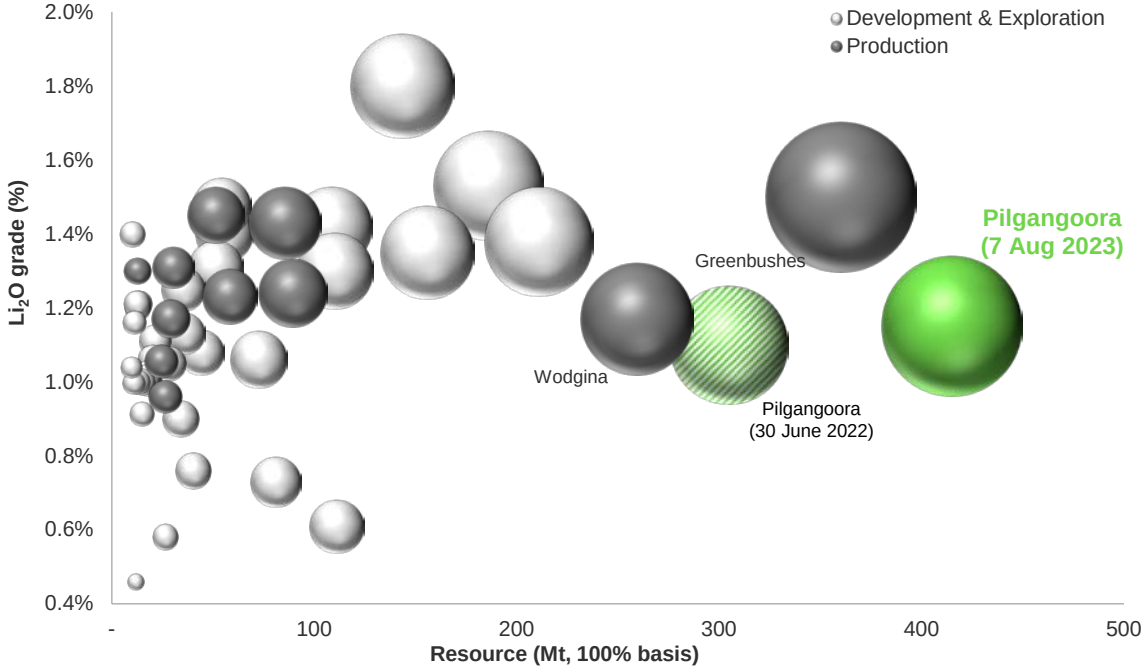
Figure 1 – Global hard rock lithium project landscape (bubble size represents Resource Lithium Carbonate Equivalent (LCE))[2]



Mineral Resource informing Ore Reserve update

The updated JORC 2012 Ore Reserve incorporates drilling data acquired through exploration campaigns completed by Pilbara Minerals between November 2014 and June 2023 including all results from the 2023 Financial Year (FY23), 153-hole exploration and development drilling campaign. The Ore Reserve accounts for depletion of 5.6Mt due to mining activity from 30 June 2022 to 30 June 2023.

The Ore Reserves are based on an updated Mineral Resource of 413.8Mt @ 1.15% Li_2O, carried out by independent resource consultancy, Trepanier Pty Ltd, resulting in the estimation of Measured, Indicated and Inferred Resources. The Mineral Resource models were established within wireframes of pegmatite based on geological and structural logging, geochemical assays and pit mapping, with estimates developed using Ordinary Kriging and one-metre composites. The reporting of all domains (using a cut-off of 0.2% Li_2O and depleted to end of June 2023) results in a Measured, Indicated and Inferred Mineral Resource estimate as outlined in Table 1 and as announced on 7 August 2023**.**

Table 1 – Pilgangoora Operation – updated JORC Mineral Resource as at 30 June 2023 (using 0.2% Li_2O cut-off)

Category	Tonnes (Mt)	Li_2O (%)	Ta_2O_5 (ppm)	Fe_2O_3 (%)	Li_2O (Mt)	Ta_2O_5 (M lb)
Measured	22.1	1.34	146	0.44	0.3	7
Indicated	315.2	1.15	106	0.53	3.6	74
Inferred	76.6	1.07	124	0.54	0.8	21
Total	**413.8**	**1.15**	**112**	**0.53**	**4.8**	**102**

[2] Sources: Company filings as at 31 July 2023. Refer Appendix 2. Note: 'Production' assets defined as those currently in commercial production. 'Development' assets defined as those with a FID declared. 'Exploration; assets defined as pre-FID. All on a 100% basis & excluding Manono.

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For further information on the Company's 2023 Mineral Resource estimate, refer to the ASX Announcement dated 7 August 2023, together with an updated breakdown of Mineral Resource by deposit area included in Appendix 3 of this release[3].

Ore Reserve Estimate as at 30 June 2023

Key parameters used as part of the Pilgangoora 2023 Ore Reserve estimation process included (but were not limited to):

- an average throughput of 6.3Mtpa of ore processed on a combined operation consisting of 5Mtpa for the Pilgan Plant and 1.3Mtpa for the Ngungaju Plant consistent with P1000 Project studies supporting the final investment decision (FID) announced on 31 March 2023;
- assumed sales price of US$1,450/t CIF for spodumene concentrate (SC6.0%), a realised price of US$36.0/lb for 25% Ta_2O_5 equivalent and an exchange rate of 0.75 AUD/USD;
- life of mine (LOM) target Li_2O recovery of 75% and 67.5% for the Pilgan and Ngungaju Plants respectively derived from P1000 Project studies;
- mining costs derived from current mining costs and first principles as part of the P1000 Project studies supporting the FID;
- processing costs consistent with the P1000 Project FID cost parameters;
- total selling costs based on current costs and those estimated during the P1000 Project FID that include spodumene concentrate (5.7% Li_2O) handling and transport, shipping, state, third party and native title royalties, insurances, and corporate head office costs; and
- no allowance considered necessary for deleterious elements.

The updated 30 June 2023 Ore Reserve is shown in Table 2 below with the JORC Code 2012 Table 1 in Appendix 1.

Table 2 - Pilgangoora Operation Ore Reserve estimate as at 30 June 2023 (using 0.3% Li_2O cut-off[4]).

Category	Tonnes (Mt)	Li_2O (%)	Ta_2O_5 (ppm)	Fe_2O_3 (%)	Li_2O (Mt)	Ta_2O_5 (M lb)
Proved	19.1	1.32	133	0.92	0.3	6
Probable	195.1	1.18	100	1.00	2.3	42
Total	**214.2**	**1.19**	**103**	**0.99**	**2.5**	**48**

Notes: (refer to Table 1 in Appendix 1 for the full Ore Reserve parameters and notices):

a) Totals may not add up due to rounding.
b) All Open-pit Ore Tonnes are defined using the weighted average cost and recovery of the Pilgan and Ngungaju Plants.
c) Ore Reserves were estimated using projected concentrate prices of US$1,450/dmt (CIF price) for 6% Li_2O concentrate and US$36/lb for 25% Ta_2O_5 concentrate.
d) The Ore Reserve is the economically mineable part of the Measured and Indicated Resource. It includes allowance for ore losses and dilution during mining extraction discussed further below.
e) Pilbara Minerals ensures that the Mineral Resource and Ore Reserve estimates quoted are subject to governance arrangements and internal controls at both a site level and at the corporate level. Mineral Resources and Ore Reserves are reported in compliance with the JORC Code 2012, using industry standard techniques and internal guidelines for the estimation and reporting of Ore Reserves and Mineral Resources. The Mineral Resources and Ore Reserve statements included in this document were reviewed by the Competent Persons prior to inclusion.
f) Stockpiles at the Ngungaju Plant have had no Ta_2O_5 grade applied.
g) The Probable Ore Reserves include 5.0Mt of stockpiles. These comprise 1.7Mt at 1.27% Li2O and 0.72% Fe2O3 at the Ngungaju Plant and 3.3Mt at 1.26% Li2O, 106ppm Ta2O5 and 0.80% Fe2O3 at the Pilgan Plant.

[3] Appendix 3 is an updated Table 3 previously stated in the ASX release dated 7 August 2023 which corrects a typographical error in the 7th column of the table which should have read “Li2O (t)” instead of “Li2O (Mt)”. There are no other changes to the table.

[4] Ore Reserves are based on an expected value calculation to report tonnages above a zero $/t net expected value, excluding mining cost. The cut-off to define ore is therefore variable in metal grades but equates to an approximate cut-off grade of 0.3% Li2O.

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The Ore Reserves consist of 9% Proved and 91% Probable. Only Measured or Indicated Mineral Resources have been converted by application of Modifying Factors to in-situ Ore Reserves. All Proved in-situ Ore Reserves have been derived from Measured Mineral Resources only. All Probable in-situ Ore Reserves have been derived from Indicated Mineral Resources only. All stockpile Ore Reserves have been classified as Probable and are not included in the Mineral Resource.

Approximately 1,635Mt of associated waste material will be mined including mineralised waste, resulting in a waste material to economic Ore Reserve ratio of 7.6 to 1 (waste tonnes: ore tonnes).

The Ore Reserve is the economically mineable part of the Measured and Indicated Resource. It includes allowances for mining dilution and ore losses during mining. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction can reasonably be justified.

Near surface oxidised material above the cut-off grade was treated as waste for the purposes of the Ore Reserve estimate but has potential to be added to the mining inventory with further metallurgical testing.

The model used for the Mineral Resource estimate announced 7 August 2023 was used as an input to the Ore Reserve estimate by conversion to a mining model using industry standard regularisation or re-blocking to make allowances for ore loss and dilution. The regularisation has resulted in a 17% loss of ore (equivalent to 83% ore recovery) and 5% dilution between the Mineral Resource model and the mining model overall. This provision for ore loss and dilution is considered appropriate by the Competent Person with FY23 reconciliation results matching ore recovery and supporting the modifying factors used for determination of the Ore Reserves. These ore loss and dilution assumptions will be revised over time to factor in ongoing ore hygiene and ore recovery improvement projects and the results from the impending implementation of ore sorting technology as part of the P680 Project with ore sorting expected to commence during CY24.

The diluted mining model was subsequently used for the generation of optimised pit shells and defining economic mining envelopes, based on various inputs, including geotechnical domains, costs and sales prices. The 2023 optimised pit shells were used as the basis for detailed open pit designs with revenue factor 1.00 pit shell used for ultimate pit designs. Additionally, sensitivity analysis to price, grade, recovery, costs (mining, processing and capital), and overall wall angles was undertaken at levels of +/- 20% using Whittle optimisation software with the results confirming significantly robust economic outcomes.

The current 2.3Mtpa and the proposed P680 and P1000 Pilgan plant upgrades to 5Mtpa comprise conventional three-stage crushing, ball milling, hydro-cyclone classifiers, heavy media separation, flotation, magnetic separation, spirals, and concentrate filtration to produce spodumene concentrate and tantalite by-product. The 1.3Mtpa Ngungaju Plant comprises three-stage crushing, heavy media separation, ball milling, cyclone classification, flotation, magnetic separation and filtration to produce spodumene concentrate only. The existing Pilgan Plant, the proposed 5Mtpa Pilgan Plant, the 1.3Mtpa Ngungaju processing plant and the proposed ore sorting facility for the front end of the Pilgan plant all utilise conventional, widely used and well-tested metallurgical techniques and technology common in the industry.

Mining operations at the Pilgangoora Operation commenced in October 2017. The mining method currently used on site and proposed for continuing future operations at 6.3Mtpa plant feed rates is selective open pit excavation using drill and blast on 5 to 10m benches and load and haul on 2.5m flitches. 100t to 250t class hydraulic excavators in backhoe configuration loading into 100t to 150t class rear dump haul trucks are used to separately mine ore (pegmatite) and waste (basalt and ultramafic).

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Ore contaminated with low to moderate levels of waste is stockpiled for future processing through the ore sorting facility. Blast hole drilling is by tracked rigs enabling pit access from surface contour to pit bottom. The mining method is considered appropriate for the deposit geometry and production rates and has been in use since commencement of mining in 2017. Access is available to all designed pits, waste dumps and stockpiles and the minimum mining width for pushbacks is 40m.

The Fe_2O_3 grade of diluting waste material was derived from local estimates within lithological waste units using ordinary kriging.

The pit design parameters to achieve stable walls (as determined by geotechnical assessment of the expected rock domains) are:

- for Central, East and Far East deposits: 55° batters in weathered and 75° in transitional and fresh rock domains; benches established every 20m maximum with a minimum berm width of 10m; and 20m geotechnical berms every 100m vertical height;
- for the Monster deposit: 55° batters in weathered and 70° in fresh rock domains: and benches established every 20m maximum with a minimum berm width of 10m;
- for the Lynas Find deposit: 45° batters in weathered and 65° in fresh rock domains; and benches established every 20m maximum with a minimum berm width of 15m; and
- for the South deposit: 55° batters in weathered and 75° in transitional and fresh rock domains. Benches established every 20m maximum with a minimum berm width of 7.2m and 15m geotechnical berms every 100m vertical height.

The Pilgangoora Operation's current project area is located inside tenements either granted to or under application by Pilbara Minerals. Development of the additional 55Mt of Ore Reserve has been identified as requiring mining activity within two Exploration Licences currently held by Pilbara Minerals which will require an application to convert these Exploration Licences to Mining Leases prior to any commencement of mining activity – Pilbara Minerals believes at the time of reporting, that extraction can reasonably be justified. Sufficient land exists to locate proposed infrastructure, tailings management facilities (TMFs) and waste rock landforms (WRLs) required for the Ore Reserve. Studies are in progress to obtain approval for the Lynas Find pits, and for additional waste rock and tailings storage facilities for the remainder of the mine life. For additional future TMFs and waste storage requirements, it is expected that all necessary approvals will be received within suitable timeframes and no unresolvable issues for extraction of the Ore Reserves are anticipated.

Pilbara Minerals engages extensively with the Traditional Owners of the area encompassing the Pilgangoora Operation the Nyamal People, and the Kariyarra People who are the Traditional Owners of the surrounding area where regional exploration is undertaken and supporting project infrastructure is located with separate agreements in place with both groups.

Changes to Ore Reserve Estimates between 2022 and 2023

The Pilgangoora Ore Reserve reported as at 30 June 2023 totalled 214.2Mt grading 1.19% Li_2O and 103 ppm Ta_2O_5 and containing 2.5Mt of lithia and 48Mlb tantalum pentoxide.

The net increase in the 2023 Pilgangoora Ore Reserve of 55Mt is due to:

- the 2023 drill program of 153 holes and 46,904m of drilling comprising 39,627m of reverse circulation (RC) and 7,277m of diamond drilling;
- updates to operating costs to reflect those related to the P1000 Project's expanded production capacity;
- updated spodumene price assumptions;
- depletion from mining;

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- changes to stockpile inventories due to mining and processing; and
- a net 6% increase in global ore loss based on operations reconciliation data.

Table 3 – Changes to in-situ Ore Reserves at the Pilgangoora Operation from 30 June 2022 to 30 June 2023 (using 0.3% Li2O cut-off).

Total Ore Reserves	Tonnes (Mt)	Li_2O (%)	Ta_2O_5 (ppm)	Fe_2O_3 (%)	Li_2O (Mt)	Ta_2O_5 (M lb)
Ore Reserves as at 30 June 2022	158.8	1.18	101	1.03	1.9	35
Ore Reserves as at 30 June 2023	214.2	1.19	103	0.99	2.5	48
Total change from 30 June 2022 to 30 June 2023	**55.4**	**1.22**	**111**	**0.90**	**0.7**	**13**

Note: rounding applied to numbers in Table 1, 2 and 3 above and totals may not add up due to this rounding.

The 2023 Pilgangoora Ore Reserve update estimate represents a net increase of approximately 55Mt grading 1.22% Li_2O, containing 0.7Mt of Li_2O as outlined in Table 3. This net increase adjusts for a decrease of 5.6Mt, containing 77,000t of Li_2O due to depletion from mining activity at the Pilgangoora Operation from 30 June 2022 to 30 June 2023.

All Proved Ore Reserves were derived from Measured Mineral Resources only. All Probable Ore Reserves were derived from Indicated Mineral Resources only plus stockpiles. As illustrated in Figure 2, over 295,000m of RC and diamond drilling have been completed within the integrated resource area since 2008 with approximately 1,400 resource tonnes added for every metre drilled. The Company remains confident that the Mineral Resource and Ore Reserve can be further expanded with ongoing drilling including the East Extension and Central Extension as shown in the drill hole location plan Figure 10.

Figure 2 - Conversion of drilling activity per kilometre to Mineral Resources and Ore Reserves

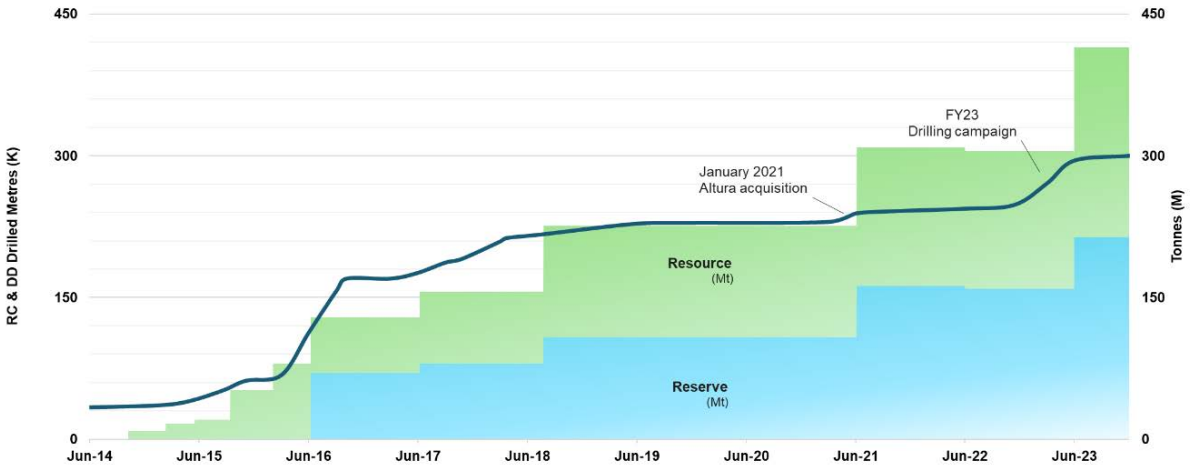

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Figure 3 – Oblique View (looking -45/065 of the mineralised domains (pegmatites) modelled in Leapfrog™

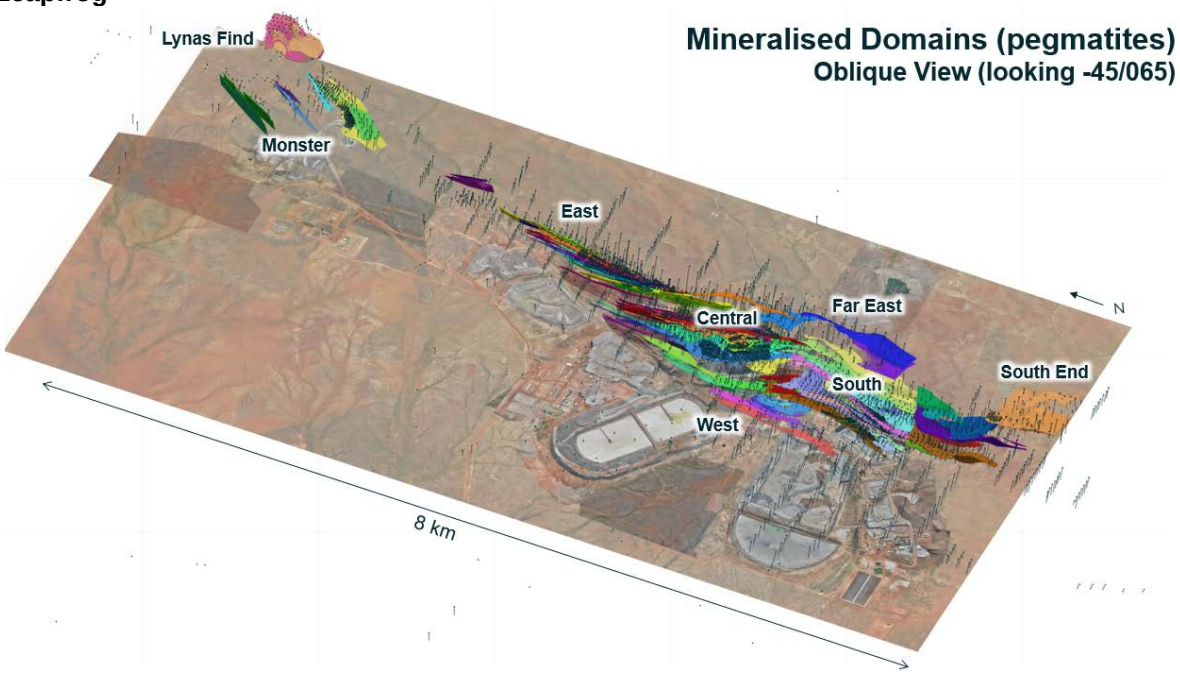

Figure 4 – Oblique view (looking -30/290) showing mineralised domains (pegmatites) and 2023 LOM pit designs

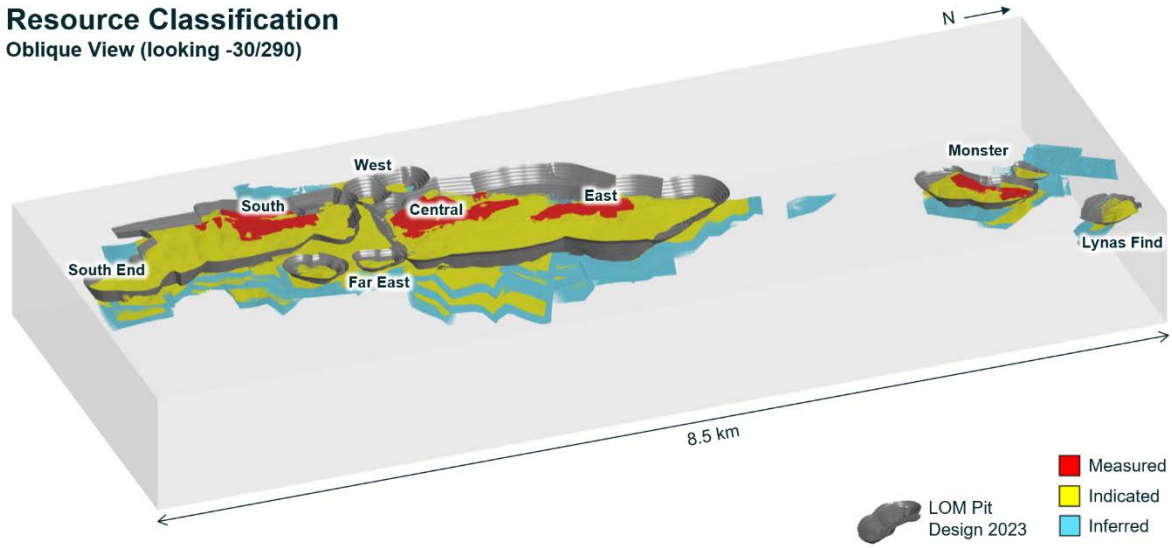

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Figure 5 – Oblique view (looking -30/290) showing Li_2O grade distribution and 2023 LOM pit designs

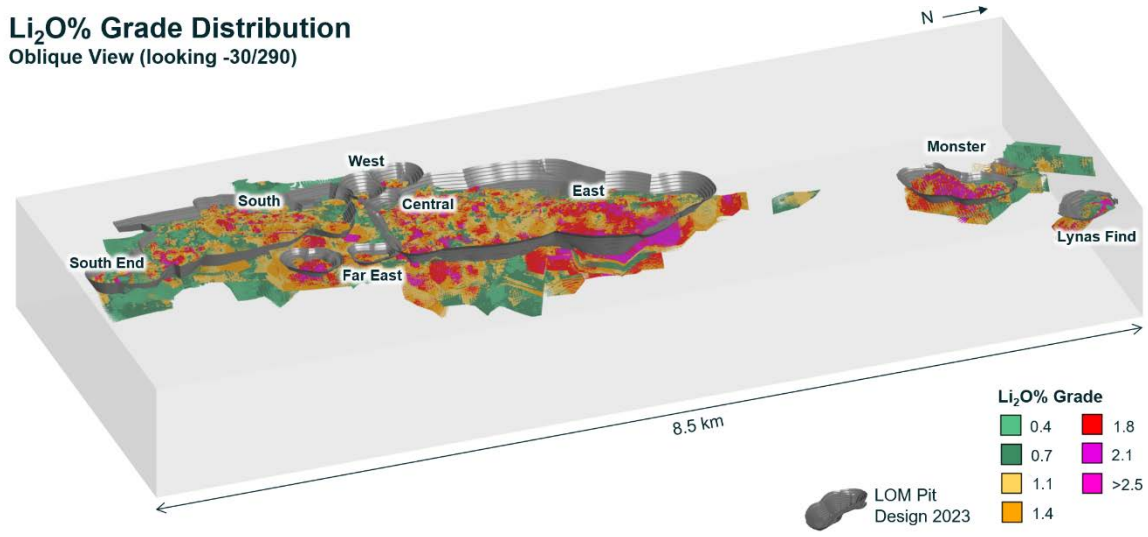

Figure 6 – Cross section 7,670,975mN – Central-East Pit and 2023 Reserve pit shell

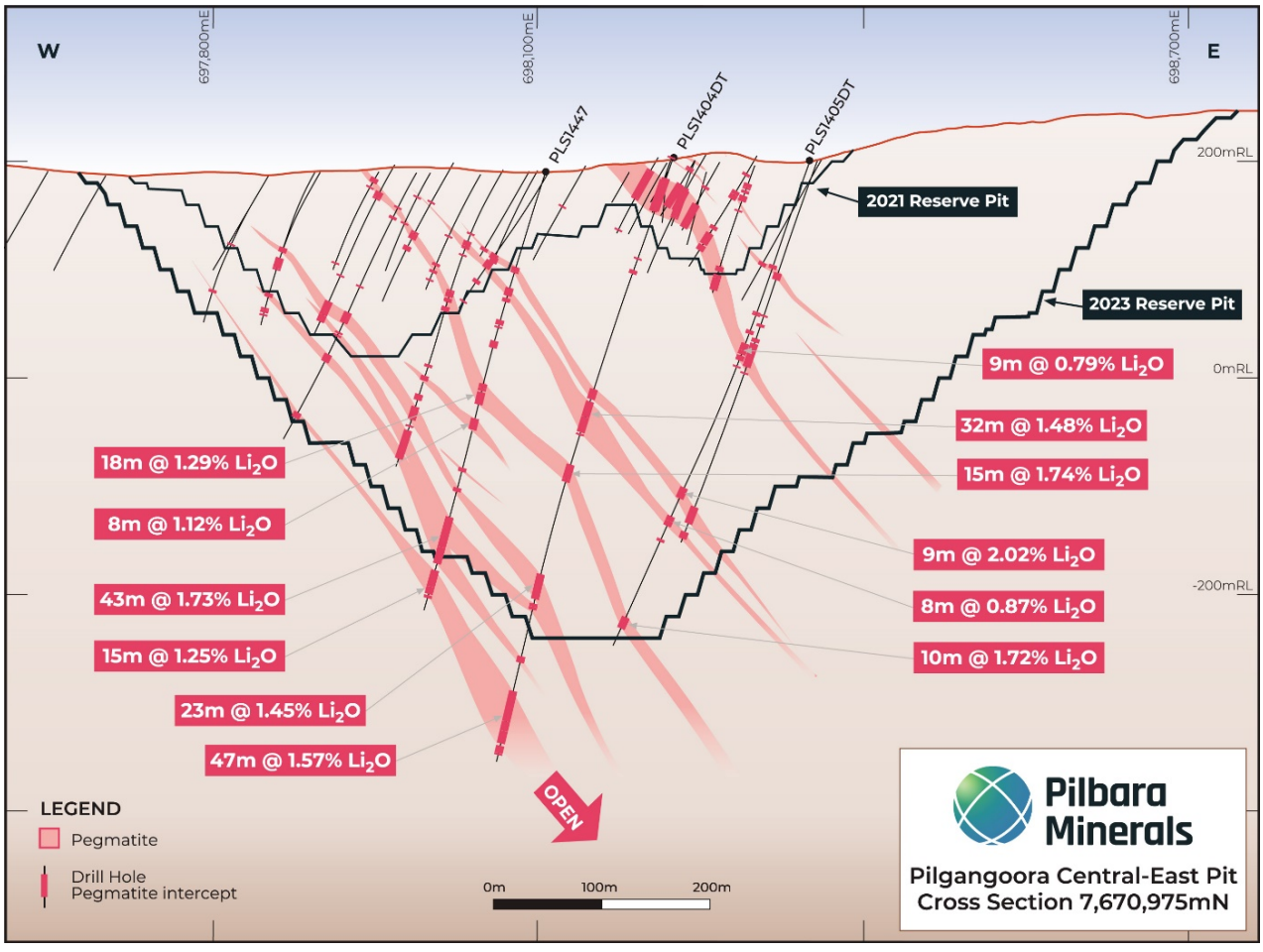

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Figure 7 – Cross section 7,671,850mN – East Pit cross section and 2023 Reserve pit shell

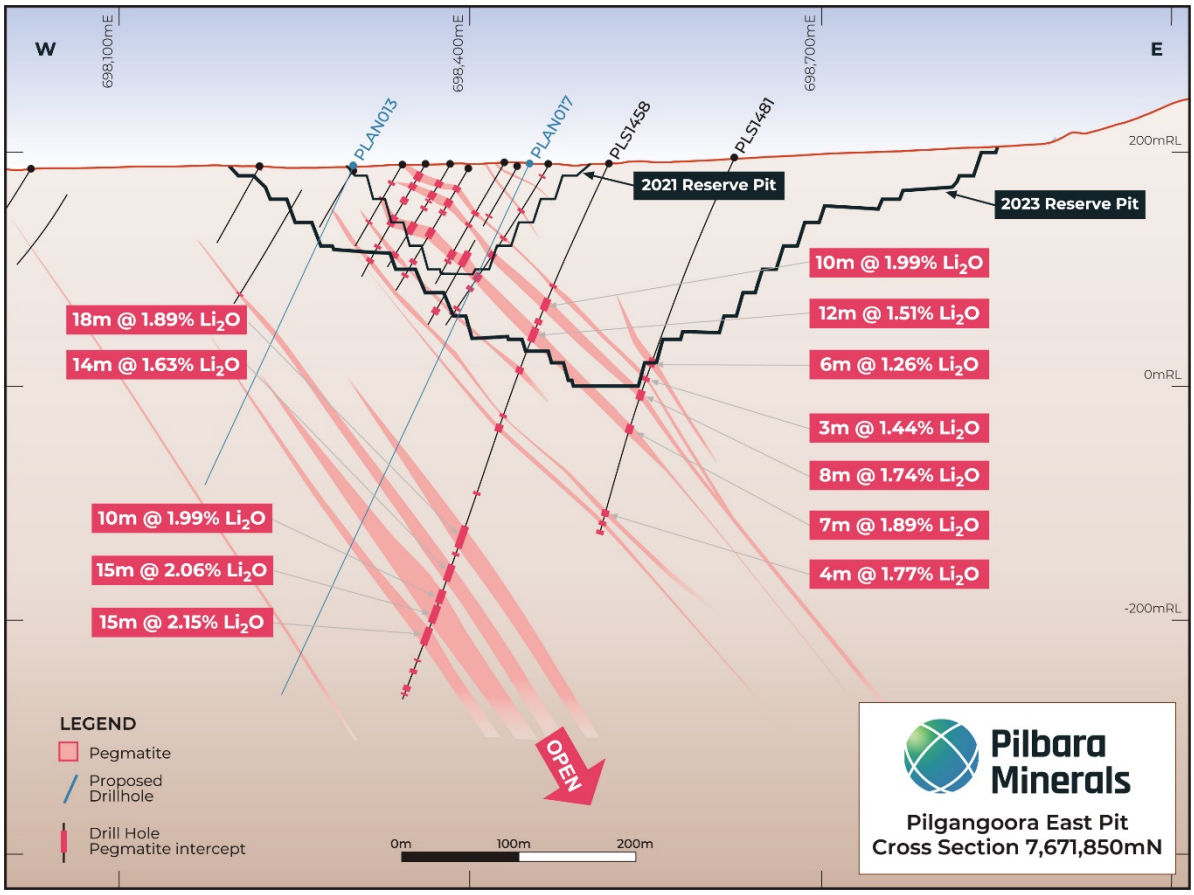

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Figure 8 – Central Pit - Cross section 767,0150mN showing resource classifications and pit shells

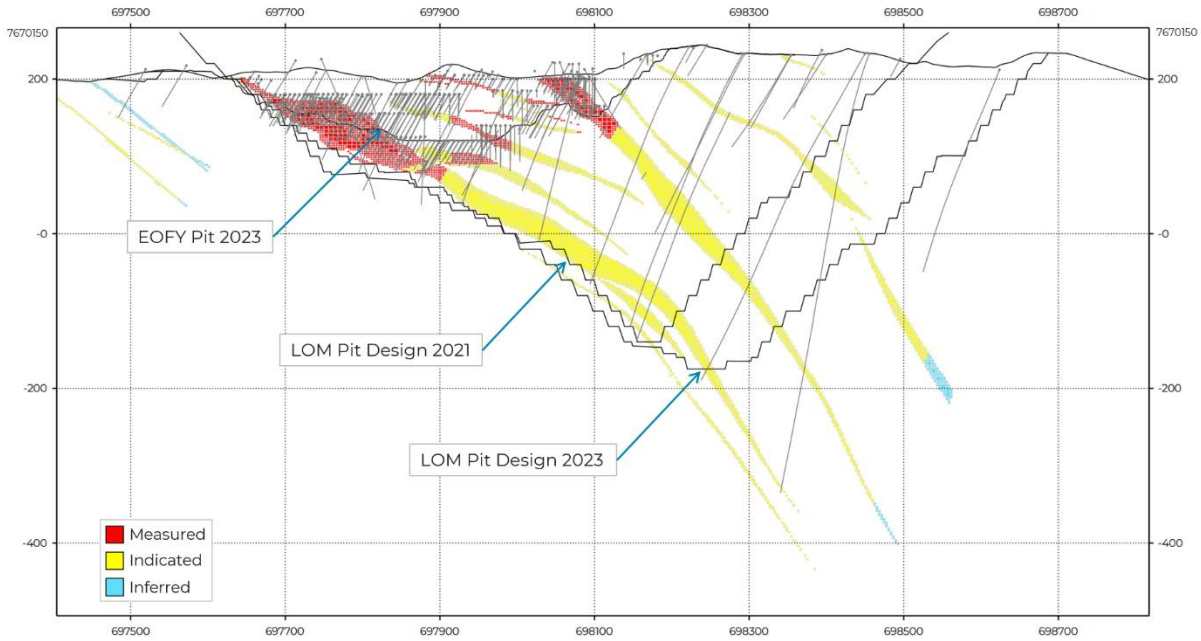

Figure 9 – Drilling at the East Extension Area

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Figure 10 – Drill hole location plan Pilgangoora Operation area and cross section locations

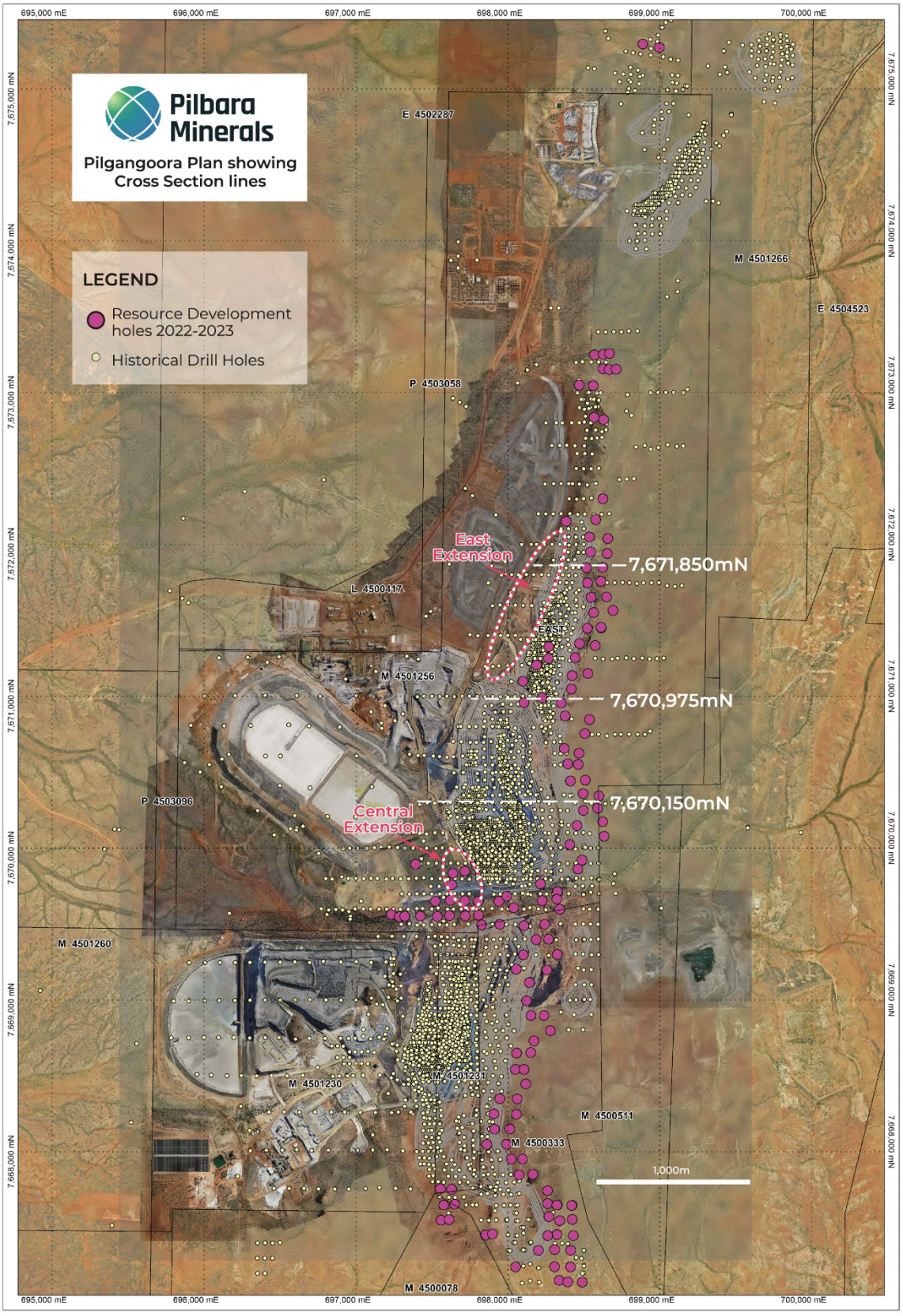

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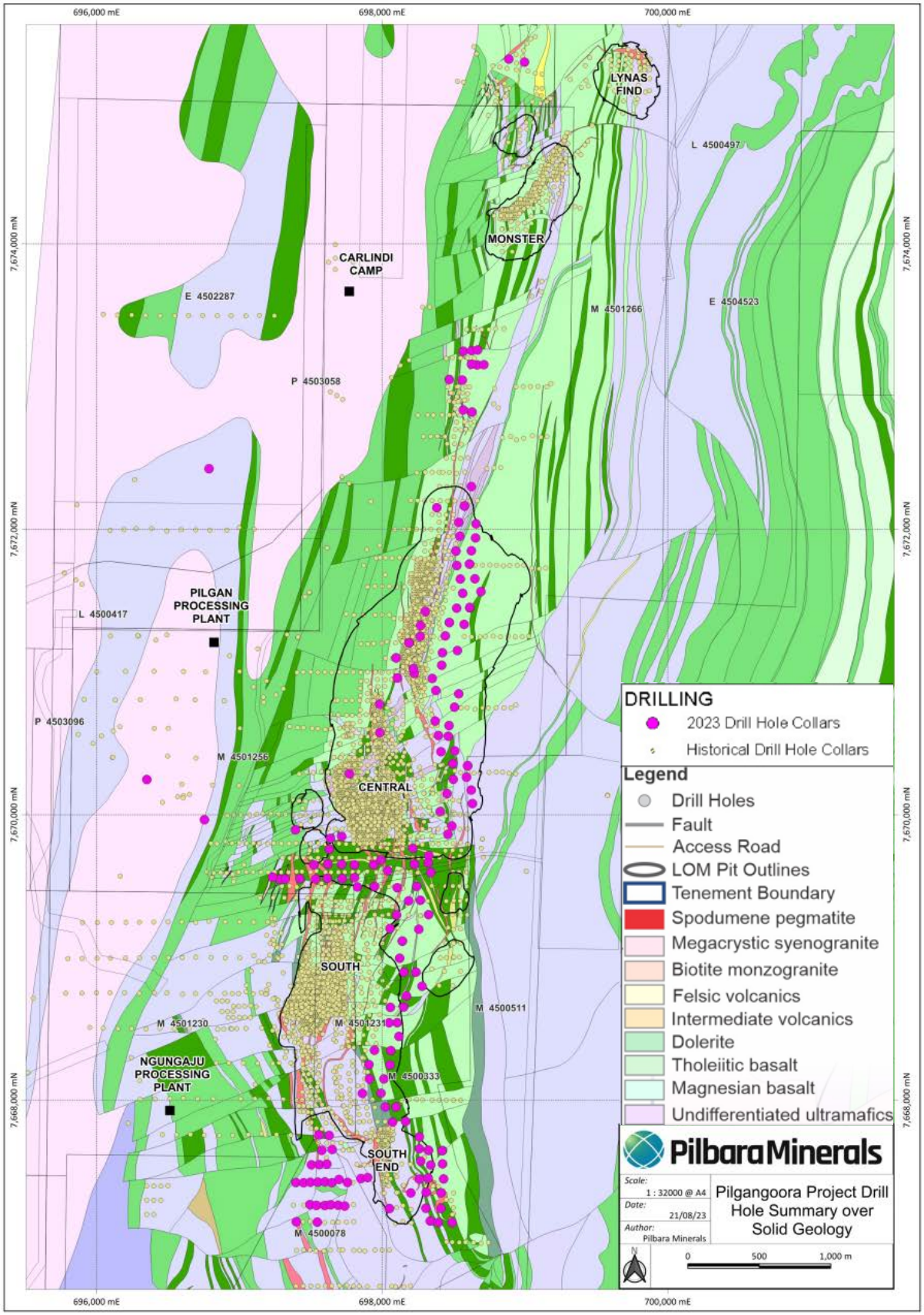
Figure 11 – Geology and drill hole summary



Release authorised by Dale Henderson, Pilbara Minerals Limited's Managing Director.

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ABOUT PILBARA MINERALS

Pilbara Minerals owns 100% of the world's largest, independent hard-rock lithium operation. Located in Western Australia's resource-rich Pilbara region, the Pilgangoora Operation produces a spodumene and tantalite concentrate. The significant scale and quality of the operation has attracted a consortium of high quality, global partners including Ganfeng Lithium, General Lithium, POSCO and Yibin Tianyi. While it continues to deliver a quality spodumene concentrate to market, Pilbara Minerals is pursuing a growth, chemicals and diversification strategy to become a sustainable, low-cost lithium producer and fully integrated lithium raw materials and chemicals supplier in the years to come.

COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr John Holmes (Head of Geology and Exploration at Pilbara Minerals Limited). Mr Holmes is a shareholder of Pilbara Minerals. Mr Holmes is a member of the Australasian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Holmes consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The information in this report and the ASX release dated 7 August 2023 that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes (Consultant with Trepanier Pty Ltd) and Mr John Holmes (Head of Geology and Exploration at Pilbara Minerals Limited). Mr Holmes is a shareholder of Pilbara Minerals. Mr Barnes is a member of both the Australasian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy, Mr Holmes is a member of the Australasian Institute of Geoscientists and each has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Barnes and Mr Holmes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The information in this report that relates to Ore Reserves is based upon information and supporting documentation prepared by and mine planning work supervised by Mr Ross Jaine (Manager Mine Planning of Pilbara Minerals Limited). Mr Jaine is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the style of mineralization and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jaine consents to the inclusion in this report of the matters based on their information in the form and context in which they appear.

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Appendix 1 - JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• The deposit has been sampled using a series of reverse circulation (RC) holes and diamond holes. Diamond holes drilled for metallurgical sampling and checking of existing RC holes by drilling "twins". More recent diamond core tails drilled for resource extension evaluation. • Talison Minerals Pty Ltd ("=Talison) conducted a 54 drill hole RC program in 2008 totalling 3,198m and 29 drill holes for a total of 2,783m in 2010. • Between 2010 and 2012, Talison changed its name to Global Advanced Metals (GAM). GAM completed 17 RC holes for 1,776m in 2012. • Pilbara Minerals have completed a total of 1,407 exploration holes for 200,420m since acquiring the Pilgangoora Operation. This includes 184,200m of exploration RC drilling, and 16,223m of diamond drill core. This also includes 46,902m of drilling in the 12 months leading up to this resource update. A total of 117,411m of infill RC grade control drilling has been completed over the deposit. • A total of 83,785m of RC drilling and 2,298m of diamond drilling were completed by Altura. • Dakota Minerals Ltd (Dakota) drilled 63 RC holes for 5,276m and 12 diamond holes for 100m in 2016.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Talison/GAM RC holes were all sampled every metre, with samples split on the rig using a cyclone splitter. The sampling system consisted of a trailer mounted cyclone with cone splitter and dust suppression system. The cyclone splitter was configured to split the cuttings at 85% to waste (to be captured in 600mm x 900mm green plastic mining bags) and 15% to the sample port in pre-numbered, draw-string calico sample bags (12-inch by 18-inch). • In subsequent RC drilling completed by Pilbara Minerals during 2015 and 2016 samples were collected every metre in pegmatite zones and a combination of 2m to 6m into footwall and hanging wall country rock for

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Criteria	JORC Code explanation	Commentary
		waste rock characterisation studies. • Pilbara Minerals diamond core (PQ and HQ) drilled between 2015 and 2018 was sampled by taking a 15-20mm fillet at 1m intervals within the pegmatite zones. HQ Core drilled in 2023 was cut and sampled as half core. NQ was cut and sampled as half-core. • Dakota RC samples were sampled every metre and collected using a rig-mounted cyclone splitter including a dust suppression system. Approximately 85% of the RC chips were split to 600mm x 900mm green plastic mining bags for storage and logging and 15% was captured at the sample port in draw-string calico sample bags. Diamond holes were PQ core and were twins of RC holes drilled for metallurgical purposes. Half core was used for metallurgical testwork, whilst quarter core was used for assaying. • Pilbara Minerals' RC holes drilled between 2014 and 2023 were sampled every metre, with samples split on the rig using a cyclone splitter. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. The cyclone splitter was configured to split the cuttings at 85% to waste. The 15% sample taken for analysis was collected from the sample port in draw-string calico sample bags (10-inch by 14-inch). Waste sample collected from 2014 to 2022 was to be captured in 600mm x 900mm green plastic mining bags. In 2023, two x 15% samples were collected from the sample port, with the first taken for analysis and the second for sieving. The remaining 60% waste sample collected in 2023 was discarded. • Altura drilling sampled RC holes on 1m intervals from the beginning to end of each hole. Each 1m sample was split directly using a rig-mounted riffle splitter and then collected into a uniquely numbered calico bag. The remaining material for each 1 m interval was collected directly off the cyclone into a numbered plastic bag and kept near the drill site for geological logging.
	Aspects of the determination of mineralisation that are Material to the Public Report.	• Talison/GAM holes are all RC, with samples split at the rig sent to the Wodgina site laboratory and analysed by XRF for a suite of 36 elements. • Selected pulps from the 2008 and 2010 drilling plus all pegmatite pulps

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Criteria	JORC Code explanation	Commentary
	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	from the 2012 drilling were collected and sent to SGS Laboratories in Perth for analysis of their lithium content. Lithium analysis was conducted by Atomic Absorption Spectroscopy (AAS). • Pilbara Minerals' RC samples were split at the rig and sent to the Nagrom laboratory in Perth and analysed by XRF and ICP. • Pilbara Minerals' diamond core was cut at Nagrom (2015) and IMO (2016), and then crushed and pulverised in preparation for analysis by XRF and ICP. • All Dakota RC 1m split samples were sent to Nagrom laboratory in Perth and analysed using ICP for 5 elements (Li, Cs, Be, Fe and Ta) Quarter core samples were sent to SGS in Perth for analysis using XRF and ICP techniques for a suite of elements. • Exploration drill holes in 2021 were all RC, with samples split at the rig, samples are then sent to Nagrom laboratory in Perth and analysed for a suite of multi-elements. Analysis was completed by XRF and ICP techniques. • For exploration RC drill holes from 2022 to 2023 samples were split at the rig, samples are then sent to Nagrom and SGS laboratories in Perth and analysed for a suite of multi-elements. Analysis was completed by XRF and ICP techniques. • For diamond core drill holes from 2022 to 2023 HQ core was cut with half core samples sent to Nagrom and SGS laboratories in Perth and analysed for a suite of multi-elements. Analysis was completed by XRF and ICP techniques. • Exploration RC samples on 1m intervals from Altura were split at the rig and then sent to either LabWest or SGS laboratories for analysis by XRF and ICP techniques. • Diamond core from Altura was cut, sample lengths were determined by mineralisation logged in the core. Half core samples through mineralised zones were sent to the laboratory for analysis.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-*	• The drilling rig used in 2008 is not noted in any reports. • The 2010 drilling was completed by Australian Drilling Solutions using an

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Criteria	JORC Code explanation	Commentary
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	Atlas Copco Explorac 220 RC truck mounted drill rig with a compressor rated to 350 psi / 1200 cfm and a booster rated to 800 psi, with an expected 600 psi down-hole. An auxiliary booster/compressor was not required at any point during the drilling. • The 2012 drilling was completed by McKay Drilling using an 8x8 Mercedes Truck-mounted Schramm T685WS rig with a Foremost automated rod-handler system and on-board compressor rated to 1,350 cfm/500 psi with an auxiliary booster mounted on a further 8x8 Mercedes truck and rated at 900 cfm/350 psi. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a trailer mounted cyclone with cone splitter and dust suppression system. • Pilbara Minerals' 2014 drilling was completed by Quality Drilling Services (QDS Kalgoorlie) using a track mounted Schramm T450 RC rig with a 6x6 truck mounted auxiliary booster and compressor. Drilling used a reverse circulation face sampling hammer with nominal 51/4" bit. The system delivered approximately 1800 cfm @ 650- 700 psi down hole whilst drilling. • The 2015 RC drilling was undertaken by Orbit Drilling (200 holes), Mt Magnet Drilling (44 holes) and Strike Drilling (11 holes). Orbit used two track mounted rigs; a Schramm T450 RC rig, and a bigger Hydco 350 RC rig. Mt Magnet also used a track mounted Schramm T450 RC Rig; Strike drilling used an Atlas Copco X350 RC rig mounted on a VD3000 Morooka rubber track base with additional track mounted booster and auxiliary compressor. • Diamond drilling during 2015 was completed by Orbit Drilling, using a truck mounted Hydco 1200H rig, drilling HQ sized core. • The 2016 resource RC drilling was completed by 4 track mounted RC rigs and 2 diamond rigs. 2 Atlas Copco X350 RC rigs mounted on a rubber track mounted Morooka base were used by Strike drilling together with track mounted booster and auxiliary compressor. 2 track mounted RC rigs were also used by Mt Magnet Drilling, a Schramm T450 rig and a UDR250 rig. • Diamond drilling during 2016 was completed by 2 Mt Magnet Drilling rigs drilling a combination of PQ, HQ & NQ size core. A truck mounted Hydco

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		650 rig and support truck and a TR1000 track mounted rig and track mounted support vehicle was used. • Dakota RC Drilling was predominantly reverse circulation drilling with 2 diamond drill holes. Holes range in dip from approximately 60º to vertical. Average depth of drilling is 85m and ranging from 16m to 206m. RC drilling was undertaken by two drilling companies; o Mount Magnet Drilling using a track-mounted rig (Schramm T450) and compressor (rated 1,350 cfm/800 psi) and 6WD support truck. The drill rig utilised a reverse circulation face sampling hammer, with 138mm bit. The sampling was conducted using a rig-mounted cyclone with cone splitter and dust suppression system. o Strike Drilling, using a truck-mounted KWL700 RC rig, which used a rig-mounted cyclone and cone splitter, and dust suppression system. • RC drilling in 2018 was completed by Strike Drilling using a KWL1000 truck mounted rig and Mt Magnet Drilling using an RC300 track mounted Schramm drill rig. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. • Exploration RC drilling in 2021 was completed by Mt Magnet Drilling utilising an RCD300-2 track mounted drilling rig with a truck mounted booster and auxiliary compressor (900cfm/350psi) coupled to a V8 booster up to 1000psi. Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. • Altura drilling between 2010 and 2013 included both RC and diamond holes. Drilling was completed using a PRD2000 multipurpose rig rated at 1120 cfm @350 psi. In 2016 9 diamond holes were drilled to twin RC holes. This was undertaken by DDH1 using a Sandvik UDR 1200 (PQ3 size core), truck mounted rig. RC drilling in 2016 was undertaken by Strike Drilling using a truck mounted rig SD02/KWL700, and Mount Magnet Drilling with a RC450 Hydco track mounted rig as well as a MP1300 multipurpose truck mounted rig.

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Criteria	JORC Code explanation	Commentary
		• Exploration RC drilling in 2022 to 2023 was completed by three drilling companies; Mt Magnet Drilling, Strike Drilling and Orlando Drilling. Mt Magnet Drilling used a RCD300-2 track mounted drilling rig with a truck mounted booster and auxiliary compressor (900cfm/350psi) coupled to a V8 booster up to 1000psi. Strike Drilling Pty Ltd using a KWL1000 truck mounted Schramm 685 drill rig. Orlando Drilling utilised two Atlas Copco E220 RC track mounted drill rigs. Drilling utilised a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	• Recoveries for the majority of the historical holes are not known, while recoveries for 2012 GAM holes were overwhelmingly logged as "good." • Recoveries for Pilbara Minerals' RC and diamond holes were virtually all dry and overwhelmingly logged as "good." • Recoveries for Dakota RC and diamond holes were recorded as "good" by the geologist. • Altura RC holes were mostly recorded as "Dry" by the geologist. • Sample recovery in 2021 was recorded as good for all RC holes. • Sample recovery in 2022 – 2023 drilling program was recorded as good for RC holes.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	• Whilst drilling through the pegmatite, rods were flushed with air after each metre drilled for GAM and Pilbara Minerals' holes; and after every 6 m for Dakota holes. In addition, moist or wet ground conditions resulted in the cyclone being washed out between each sample run. • Loss of fines as dust was reduced by injecting water into the sample pipe before it reached the cyclone. This minimises the possibility of a positive bias whereby fines are lost, and heavier, tantalum bearing material, is retained.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• No material bias has been identified. • The assay results of duplicate RC and paired DD hole samples do not show sample bias caused by a significant loss of/gain in lithium values caused by loss of fines.

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Criteria	JORC Code explanation	Commentary
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• 1 m samples were laid out in lines of 20 or 30 samples with cuttings collected and geologically logged for each interval and stored in 20 compartment plastic rock-chip trays with hole numbers and depth intervals marked (one compartment per 1 m). Geological logging information was recorded directly onto digital logging system and information validated and transferred electronically to database administrators in Perth. The rock-chip trays are stored on site at Pilgangoora in a secured containerised racking library.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• Pilbara Minerals' diamond core was transported to Nagrom laboratories for cutting, sampling and detailed logging in 2015. • During the 2016 drilling program diamond core was logged in detail on site and dispatched to ALS laboratories in Perth for cutting, sampling & assaying. • During the 2017 PQ drilling program diamond core was logged in detail and cut on site & the filleted samples were sent to Nagrom laboratories in Perth for analysis. Some of remnant core is also stored at Nagrom laboratories, the remainder on site at Pilgangoora. • All remnant drill core (excluding 2019 PQ core) is currently stored on pallets at Pilgangoora. • All core collected during the 2022-2023 drilling program was logged in detail and half cut onsite using an automatic enclosed Corewise coresaw. Cut core was sent to Nagrom and SGS laboratories in Perth for analysis. • All remnant half core from the 2022-2023 drilling program has been palletised and stored at Pilgangoora for future testwork. • All drill core has been photographed dry and wet using a specialised photography frame and camera. All images are labelled and stored on Pilbara Minerals' server.
	The total length and percentage of the relevant intersections logged.	• The database contains lithological data for all holes in the database.

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Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• RC samples collected by Talison/GAM were generally dry and split at the rig using a cyclone splitter. • RC samples collected by Pilbara Minerals, Dakota and Altura were virtually all dry and split at the rig using a cone splitter mounted directly beneath the cyclone. • A 15 to 20 mm fillet of core was taken every metre of PQ or HQ core. NQ core was halved. • Dakota drilled PQ sized diamond holes, and cut and sampled half core for metallurgical tests, and quarter core for assaying. • All 2017-2019 drill core was cut and sampled at the core logging facility at Pilgangoora. • RC samples in 2021 were generally dry and split at the rig using a cyclone splitter, which is appropriate and industry standard. • Altura HQ sized diamond holes and cut and sampled half core for assaying. • HQ core collected during the 2022-2023 drilling program was logged in detail and half cut and sampled onsite using an automatic enclosed Corewise coresaw. Cut core was sent to Nagrom and SGS laboratories in Perth for analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Talison/GAM/Pilbara Minerals samples have field duplicates as well as laboratory splits and repeats. • Similarly, 238 sample pulps were collected to check ALS Laboratory results by Nagrom laboratories in 2016. • 55 Dakota GAM Wodgina laboratory splits of the samples were taken at twenty metre intervals with a repeat/duplicate analysis also occurring every 20m and offset to the lab splits by 10 samples. In total one field duplicate series, one splits series and one lab duplicate/repeat series were used for quality control purposes assessing different stages in the sampling process. This methodology was used for the samples from the 2010 and 2012 drilling programs. Comparison of these splits and duplicates by using a scatter chart to compare results show the expected strong linear relationship reflecting the strong repeatability of the analysis process.

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Criteria	JORC Code explanation	Commentary
		• The GAM and Pilbara Minerals' RC drilling contains QC samples (field duplicates and laboratory pulp splits, GAM internal standard, selected CRM's for Pilbara Minerals), and have produced results deemed acceptable. • 110 sample pulps (10% of the June 2015 resource composite samples) were selected from across the pegmatite zones for umpire checks with ALS Laboratory Perth. 238 sample pulps from the 2016 drilling were selected from across the pegmatite zones for umpire checks with Nagrom. All closely correlated with the original assays. • Dakota field RC duplicates, pulp duplicates and coarse diamond field duplicates generally indicate good repeatability of samples. • Samples were selected from pegmatite pulps for re-assaying by ALS (original lab was Nagrom), and were also resampled and sent to ALS for analysis. • QAQC has been maintained regularly on the Nagrom laboratories' results from the 2017-2021 drilling, with duplicates and standards showing consistent precision and accuracy. • The majority of the Altura exploration drilling was undertaken at LabWest. 153 samples from 7 holes were submitted to Ultratrace for umpire checks. Results were comparable, with a slight bias towards the Ultratrace results. • Altura P17 and P18 series holes were sent to SGS for analysis. QC of standards and field duplicates returned results within acceptable ranges. 774 samples were sent to Intertek for umpire checks, with good correlation noted for Li_2O and Fe_2O_3. • QA/QC has been maintained for all sample submissions for the 2022-2023 drilling campaigns with duplicates and standards showing consistent precision and accuracy. • 75 duplicate core samples were prepped using tungsten-carbide bowls and LM5s to ascertain iron contamination from the SGS Laboratories sample preparation procedure. A contamination factor was calculated and applied to SGS samples.

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	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	• For the Talison/GAM/Pilbara Minerals RC drilling, field duplicates were collected every 20m, and splits were undertaken at the sample prep stage on every other 20m. • Talison/GAM/Pilbara Minerals' RC samples have field duplicates as well as laboratory splits and repeats. • Pilbara Minerals' diamond holes have laboratory splits and repeats. • Duplicates submitted by Dakota included field RC duplicates, pulp duplicates from diamond core, and coarse crushed diamond core duplicates. • For all Pilbara Minerals' holes from 2016 to 2023 field duplicates were taken approximately every 20m, and standards and blanks every 50 samples. • Altura submitted duplicates approximately every 15m, and standards every 50m.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	• Drilling sample sizes are considered to be appropriate to correctly represent the tantalum and lithium mineralisation at Pilgangoora based on the style of mineralisation (pegmatite) and the thickness and consistency of mineralisation.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• The Talison/GAM samples were assayed by the Wodgina Laboratory, for a 36-element suite using XRF on fused beads. • During late 2014 and 2015 Pilbara Minerals' samples were assayed at the Nagrom Perth laboratory, using XRF on fused beads plus ICP to determine Li_2O, ThO_2 and U_3O_8. • All the 2016 Pilbara Minerals' samples were assayed by ALS laboratories in Perth using a Sodium Peroxide fusion with ICPMS finish. • Dakota RC samples were assayed at Nagrom laboratories in Perth, for a 5-element suite using XRF with a sodium peroxide fusion, and total acid digestion with an ICP-MS finish. Diamond drill samples were assayed at SGS's laboratory in Perth, for a 19-element suite using XRF with a sodium peroxide fusion, and total acid digestion with an ICP-MS finish. • From 2017 to 2019, Pilbara Minerals' samples were assayed by Nagrom laboratories and analysed for a suite of 9 elements via ME-MS91 Sodium

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		Peroxide for ICPMS finish and Peroxide fusion with an ME-ICP89 ICPAES finish. • From 2021 to 2023 samples were submitted to Nagrom laboratories and analysed for a suite of 25 elements. Samples were subject to a sodium peroxide fusion and analysed using ICPOES and ICPMS techniques. • A proportion of samples collected between 2022 and 2023 were also sent SGS laboratories and analysed for a suite of 25 elements via two methods of analysis. XRF analysis with a lithium borate flux and nitrate additive was used for a suite of 20 analytes and ICP analysis using sodium peroxide fusion / HCL digest was used for another 5 analytes including beryllium, rubidium and lithium, tantalum and niobium oxides. • Altura PRC prefix holes were submitted to LabWest, and analysed by total acid digestion with an ICP-MS finish. • Altura 17P and 18P series holes were submitted to SGS laboratories and analysed for a suite of 9 elements by Borate Fusion with XRF, and Sodium Peroxide Fusion with ICP-AES finish.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• No geophysical tools were used to determine any element concentrations used in this resource estimate.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Duplicates of the samples were taken at twenty metre intervals with blanks and standards inserted every 50m. Comparison of duplicates by using a scatter chart to compare results show the expected strong linear relationship reflecting the strong repeatability of the sampling and analysis process. • Drilling contains QC samples (field duplicates, blanks and standards plus laboratory pulp splits, and laboratory internal standards), and have produced results deemed acceptable.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.*	• Infill drilling completed by GAM in 2012 and Pilbara Minerals in 2014 to 2016 confirmed the approximate width and grade of previous drilling. • Eight of the diamond holes were drilled as twins to RC holes and compared to verify assays and lithology during 2015. • An additional 8 diamond holes were drilled as twins to RC holes to verify

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Criteria	JORC Code explanation	Commentary
		assays & lithology during 2016. The remainder were drilled for metallurgical or geotechnical testwork. • Dakota drilled two twin RC/DDH holes which show good constancy of mineralisation. • A number of the 2017 PQ diamond core holes were also drilled as twin holes to verify results from RC drilling. Results compare favourably. • Additional PQ drilling was undertaken in 2019, with some holes drilled as twins. Results compare favourably. • RC grade control drilling has been undertaken on nominal 12.5m centres since the commencement of operations in 2018. Geological wireframes have been adjusted where required for grade control models.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• An electronic relational database containing collars, surveys, assays and geology is maintained by Trepanier Pty Ltd, an Independent Geological consultancy.
	Discuss any adjustment to assay data.	• Tantalum was reported as Ta_2O_5 % and converted to ppm for the estimation process. • A two-step adjustment has been applied to the Fe_2O_3 assays to account for (i) contamination of pulps by the steel bowl at the grinding stage, and (ii) contamination of RC chips with the drill bit and tube wear with increasing hole depth. Step one is to subtract 0.33% from all Nagrom Fe_2O_3 assays and 0.47% from all ALS Fe_2O_3 assays, step 2 is to subtract a regressed factor by depth from all Pilbara Minerals, Altura and historic RC samples. No second factor has been applied to the Pilbara Minerals or Altura diamond core Fe_2O_3 assays. Additional Fe_2O_3 analysis on 75 diamond drill core samples has been undertaken in 2023 by SGS laboratories and a factor of 0.85% has been determined and applied to Fe_2O_3 assays. • For Dakota assays Li_2O was used for the purposes of reporting, as reported by Nagrom and SGS laboratories. Ta was adjusted to Ta_2O_5 by multiplying by 1.2211. Fe was adjusted to Fe_2O_3 by multiplying by 1.4297. Fe_2O_3 values were adjusted by subtracting 0.52% Fe_2O_3 from all RC samples, which is the total correction factor for contamination caused by steel RC drill bits and pulverising the samples in steel bowls.

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Criteria	JORC Code explanation	Commentary
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Talison/GAM holes were surveyed using a DGPS with sub one metre accuracy by the GAM survey department. • Pilbara Minerals' drill hole collar locations were surveyed at the end of the program using a dual channel DGPS with +/- 10cm accuracy on northing, easting and RL by Pilbara Minerals personnel. • No down hole surveys were completed for PLC001-039 (Talison). • Gyro surveys were completed every 5m down hole for PLC040-068 (Talison). • Eastman Single Shot surveys were completed in a stainless steel starter rod approximately every 30m for PLC069-076 and PLRC001-009 (GAM). • Reflex EZ-shot, electronic single shot camera surveys were completed in a stainless-steel starter rod for each hole for Pilbara Minerals' November-December 2014 RC drilling completed by QDS Drilling. Reflex instruments were also used by Mt Magnet Drilling for Pilbara Minerals' RC and diamond drilling completed in 2015 and 2016. Measurements were recorded at 10m, 40m, 70m and 100m (or EOH) for each hole. • Camteq Proshot, electronic single shot cameras were completed in a stainless-steel starter rod for each hole from Pilbara Minerals' 2015 RC and diamond drilling campaigns completed by Orbit drilling. Camteq down hole survey equipment was also used for each hole for Pilbara Minerals' RC drilling by Strike. Measurements were recorded at 10m, 40m, 70m and 100m (or EOH) for each hole. • Downhole survey information was also collected using a KEEPER High-Speed Gyro Survey/Steering System Gyro instrument for selected RC and diamond holes completed in 2016. This included surveying a number of holes as an audit on the single shot surveys which compared well. • For the Dakota drilling, the drill-hole locations were located using a Navcom 3040 Real time GPS, with an accuracy of +/- 10cm vertical and +/-5cm horizontal. Down hole surveying of drill holes was conducted roughly every 30m using a Reflex multi-shot camera to determine the true dip and azimuth of each hole. Subsequently, more detailed down hole surveying was conducted to verify this data, using a High-Speed True North Seeking

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Criteria	JORC Code explanation	Commentary
		Keeper Gyroscope. • All drill holes from 2021 to 2023 were surveyed using a DGPS in GDA94, Zone 50. Down hole surveying of drill holes was conducted using a Gyro tool provided by all drilling contractors. Measurements were recorded at the bottom of each hole and every 10m up hole for vertical holes and continuous readings for angle holes. • Drill hole collar locations were surveyed at the end of each program by the mine survey team using a differential GPS (DGPS).
	Specification of the grid system used.	• The grid used was MGA (GDA94, Zone 50).
	Quality and adequacy of topographic control.	• The topographic surface used was supplied by Pilbara Minerals. Drone surveys are undertaken on a monthly basis in the active mining area and this information is merged into a master topographic surface.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	• Drilling spacings within the resource area vary between 12.5m to 200m apart. • Drilling spacings for the 2021 exploration RC holes varied between 50m to 75m apart. • Drilling spacings for the 2022-2023 exploration RC and diamond holes varied between 75 -100m apart.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	• The interpretation of the mineralised domains are supported by a moderate drill spacing, plus both geological zones and assay grades can be interpreted with confidence. • RC grade control data has been used to further define geological domains.
	Whether sample compositing has been applied.	• No compositing was necessary, as all samples were taken at 1m intervals.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The mineralisation dips between 20 and 60 degrees at a dip direction between 050 and 115 degrees for the majority of the domains. The Monster zone strikes 040 to 045 degrees and dips moderately to the south-east. In the Lynas area the pegmatite varies between horizontal and 50-degree dip towards the south and south-east. • The drilling orientation and the intersection angles are deemed appropriate.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have	• No orientation-based sampling bias has been identified.

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Criteria	JORC Code explanation	Commentary
	introduced a sampling bias, this should be assessed and reported if material.	
Sample security	*The measures taken to ensure sample security.*	• Chain of custody for Pilbara Minerals' holes were managed by Pilbara Minerals' personnel.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• The collar and assay data have been reviewed by compiling a SQL relational database. This allowed some minor sample numbering discrepancies to be identified and amended. • Drilling locations and survey orientations have been checked visually in 3 dimensions and found to be consistent. • All GAM assays were sourced directly from the laboratory (Wodgina laboratory). It has not been possible to check these original digital assay files. • Sampling techniques for historical assays including by Altura have not been audited. • The collar and assay data have been reviewed by checking all of the data in the digital database against hard copy logs. • All Pilbara Minerals' assays were sourced directly from Nagrom laboratories.

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Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites*	• Pilbara Minerals' owns 100% of mining tenements M45/1256, M45/333, M45/511, M45/1266, M45/1230 and M45/1231. • The Pilgangoora resource (including Altura) is located within M45/1256, M45/333, M45/1230 and M45/1231 which are 100% owned by Pilbara Minerals. • The Lynas Find resource is located within M45/1266.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• No known impediments.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Talison completed RC holes in 2008. • GAM completed RC holes between 2010 and 2012. • Dakota Minerals Ltd completed diamond and RC holes in 2016. • Altura completed diamond and RC holes between 2010 and 2018. Altura completed two phases of diamond drilling (phase 1 2011-2013 and phase 2 2016) with a total of 18 holes drilled.
Geology	*Deposit type, geological setting and style of mineralisation.*	• The Pilgangoora pegmatites are part of the later stages of intrusion of Archaean granitic batholiths into Archaean metagabbros and metavolcanics. Tantalum mineralisation occurs in zoned pegmatites that have intruded a sheared metagabbro.

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Criteria	JORC Code explanation	Commentary
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• RC drilling undertaken in 2021 has been previously reported in ASX announcements on 10 May 2021, 23 June 2021 and 28 July 2021. All Pilbara Minerals' drill hole information pre 2021 has been previously reported. • A summary of all exploration holes drilled in the 2022-2023 drilling campaign is included as **Appendix 1 to Pilbara's Resource Upgrade ASX Release dated 7 August 2023.**
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Length weighted averages used for exploration results. Cutting of high grades was not applied in the reporting of intercepts in **Appendix 2 to Pilbara's Resource Upgrade ASX Release dated 7 August 2023.**
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Down hole intercepts from the 2022-2023 drilling campaign have been reported and are tabled in **Appendix 2 to Pilbara's Resource Upgrade ASX Release dated 7 August 2023.** All other intercepts have been previously reported. Reported intercepts are not true width. Cross sections illustrate the modelled pegmatite domains and intersections.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See Figures 5 to 10. Cross sections showing selected holes from the program are presented as Figures 6 to 8.

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Criteria	JORC Code explanation	Commentary
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Comprehensive reporting of 2021 drill hole details have been previously reported in ASX announcements on 10 May 2021, 23 June 2021 and 28 July 2021. All other Pilbara Minerals' results have been previously reported. • A summary of drill hole details and results undertaken in 2022-2023 have been included in **Appendices 1 & 2 of Pilbara's Resource Upgrade ASX Release dated 7 August 2023.**
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All meaningful and material exploration data has been reported.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further planned drilling aims to test extensions to the currently modelled pegmatites zones and to infill where required to convert Mineral Resources to high confidence classification (i.e. Inferred to Indicated and Indicated to Measured). Drilling will be prioritised on the East Extension and Central extension areas. Additional drilling required in the Monster Corridor and several contiguous target areas within the mine corridor.

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Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• The original database was compiled by GAM and supplied as a Microsoft Access database. • Since 2013, the data have then been imported into a relational SQL Server database using DataShed™ (industry standard drill hole database management software). • Initially drilling data was supplied in excel templates, using drop down lists to verify codes. Pilbara Minerals' then implemented the OCRIS data logging software system which validates the data before it is imported to the SQL database. • Altura data has been supplied both as an Access and SQL database, and was cross checked against Pilbara Minerals' SQL Database. • The data are constantly audited and any discrepancies checked by Pilbara Minerals' personnel before being updated in the database.
	• *Data validation procedures used.*	• Normal data validation checks were completed on import to the SQL database. • Historical data have not been checked back to hard copy results, but have been checked against previous databases supplied by GAM. • All logs are supplied as excel spreadsheets/OCRIS files and any discrepancies checked and corrected by field personnel.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• John Holmes (Head of Geology and Exploration for Pilbara Minerals and a Competent Person) has been actively involved in the exploration programs with regular site visits undertaken. Lauritz Barnes (Competent Person) has also completed multiple site visits, with the most recent in April 2023.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.*	• The confidence in the geological interpretation is considered very robust. Lithium (occurring as spodumene) and tantalum (occurring as tantalite) is hosted within pegmatite dykes intruded into basalts and sediments of the East Strelley greenstone belt. The area of the Pilgangoora pegmatite field within M45/1256, M45/333, M45/1230 and M45/1231 comprises a series of

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	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	extremely fractionated dykes, sills and veins up to 65 m thick within the immediate drilling area. These dykes and veins dip to the east at 20-60° and are parallel to sub-parallel to the main schistose fabric within the greenstones. • The geological interpretation is supported by open pit mapping (current active operation), drill hole logging, assays, mineralogical studies and surface mapping completed by GAM (previously Talison), Altura and Pilbara Minerals. • No alternative interpretations have been considered at this stage. • Grade wireframes were created in Leapfrog™ Geo software and correlate extremely well with the mined, mapped and logged pegmatite veins. • The key factor affecting continuity is the presence of pegmatite.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The main modelled mineralised domains are hosted in an area stretching 8,500m (north-south from Lynas Find and Monster down to South End), ranging between 50-1,500m (east-west) in multiple veins and ranging between (minus) -550m and 220m RL (AMSL).
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.*	• Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Li_2O, Ta_2O_5 and adjusted Fe_2O_3. • Drill spacing typically ranges from 25 m to 50 m with some zones to 100-125m. Drill spacing at Central, South and Monster has been reduced to grade control spacing of 12.5 x 12.5 m in areas designated for current and near future mining operations. • Drill hole samples were flagged with modelled domain codes. Sample data was composited for Li_2O, Ta_2O_5 and Fe_2O_3 to 1m using a best fit method. Since all holes were typically sampled on 1m intervals, there were only a very small number of residuals in the diamond core holes that were sampled to geological contacts. • Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, no top-cuts were applied.

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	• *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate to low (between 15% and 30%) and structure ranges up to 500m. Domains with more limited samples used variography of geologically similar, adjacent domains. • Block model was constructed with parent blocks of 6m (E) by 20m (N) by 5m (RL) and sub-blocked to 3.0m (E) by 5.0m (N) by 2.5 m (RL). For Lynas Find, it was constructed with parent blocks of 10m (E) by 10m (N) by 5m (RL) and sub-blocked to 5m (E) by5m (N) by 2.5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains. • Three estimation passes were used. The first pass had a limit of 75m, the second pass 150m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples. The exceptions to this were domains with less than 20 samples, which used a maximum of 10 samples, a minimum of 4 samples and maximum per hole of 3 samples for the second pass. • As a potential deleterious element, Fe_2O_3 has been estimated for this resource, specifically as factored Fe_2O_3. Identification of contamination during both the sample collection (steel from drill bit and rod wear) and assay phases (wear in the steel pulverisation containers) has resulted in a detailed statistical analysis and co-located data comparison between diamond core and RC twin hole assays. Factors have been applied to the raw Fe_2O_3 assays in two steps. Step one is to subtract 0.33% from all Nagrom Fe_2O_3 assays, 0.47% from all ALS Fe_2O_3 assays, 0.2% from all historic GAM Fe_2O_3 assays, 0.4% from all Altura Fe_2O_3 assays and 0.85% from all SGS Perth Fe_2O_3 assays. Step two is to subtract a regressed factor by depth from all Pilbara Minerals, Altura and historic RC samples. No second factor has been applied to the Pilbara Minerals or Altura diamond core Fe_2O_3 assays. No second factor has been applied to the Pilbara Minerals' diamond core Fe_2O_3 assays. • The search ellipses utilised follow the trend of each dyke and were generated using Leapfrog™ Edge's Variable Orientation tool.

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		• Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralised zones. • Hard boundaries were applied between all estimation domains. • Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Pegmatite boundaries typically coincide with anomalous Li_2O and Ta_2O_5 which allows for geological continuity of the mineralised zones. A significant increase in Fe_2O_3 at the contacts between the elevated iron mafic country rock and the iron poor pegmatites further refines the position of this contact in additional to the geological logs. At Lynas Find and a number of the main domains at Pilgangoora, internal zonation domains and/or grade shells were used to model mineralogical zonation. The pegmatite vein (and grade) contact models were built in Leapfrog™ Geo software and exported for use as domain boundaries for the block model. • The reported cut-off grade (COG) adopted is 0.20% Li_2O. It has been determined based on known operational costs that have ongoing since 2018.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always*	• As expected, based on the orientations, thicknesses and depths to which the pegmatite veins have been modelled, plus their estimated grades for Li_2O and Ta_2O_5, the current mining method is open pit mining.

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	be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Mining and processing operations at Pilgan and Ngungaju (former Altura) have successfully been commissioned and in operation since 2018. • Multiple phases of advanced metallurgical test work have been undertaken as part of the definitive feasibility study and continues to be undertaken on a regular basis as part of a continuous improvement process to maximise the recovery of lithia ore.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Appropriate environmental studies and sterilisation drilling have been completed for the locations of any waste rock dump (WRD) facilities.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.*	• Pilbara Minerals initially completed specific gravity test work on nine samples across the deposit using both Hydrostatic Weighing (uncoated) on surface grab samples and Gas Pycnometry on RC chips which produces consistent results. Geological mapping and rock chip/grab sampling has not observed any potential porosity in the pegmatite. • Pilbara Minerals conducted hydrostatic weighing tests on uncoated HQ core samples to determine bulk density factors. A total of 600 core samples were tested. Measurements included both pegmatite ore and waste rock. • Regressions have been used to determine bulk density. In ore, density

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	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	assignment is based on the Li_2O content, in waste, bulk density is assigned based on Fe_2O_3 content. Formulae as follows: • Bulk density regression in ore (based on 651 pegmatite ore measurements): BD = 0.0621 x Li_2O (%) + 2.6233 • Bulk density in the waste (predominantly mafic to ultramafic rock types) and based on 569 measurements): BD = (0.0186 x Fe_2O_3) + 2.781 • Additional samples have been collected on a regular basis through the mining operations to increase the amount of available data.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. • Measured Mineral Resources are defined nominally on 12.5m E x 12.5m N grade control spaced drilling with limited areas up to 12.5m E by 25m N or 25m E by 25m N. Indicated Mineral Resources are defined nominally on 50m E x 50m to 100m N spaced drilling and Inferred Mineral Resources nominally up to 100m E x 100m to 125m N with consideration always given for the confidence of the continuity of geology and mineralisation. • Consideration to the Reasonable Prospects of (Eventual) Economic Extraction (RPEEE) as described by the JORC Code (2012) is clearly demonstrated and very well understood through successful continuous mining and processing operations at Pilgan and Ngungaju since commissioning in 2018. • The reported cut-off grade (COG) adopted is 0.20% Li_2O and has been determined based on known operational costs that are ongoing. • All factors considered, the resource estimate has in part been assigned to Measured and Indicated resources with the remainder to the Inferred category.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• As part of the Definitive Feasibility Study (DFS) completed in 2016, and subsequent to multiple phases of technical due diligence as part of financing, along with audits/reviews have been completed on the Pilgangoora Mineral Resource with no material flaws identified

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Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC 2012 Code. • The statement relates to global estimates of tonnes and grade.

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Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in section 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Pilbara Minerals' Pilgangoora Operations open pit Ore Reserve estimate is based on the Mineral Resource released on 7 August 2023, by Pilbara Minerals with the Competent Persons for the Mineral Resources: Mr John Holmes (Head of Geology and Exploration at Pilbara Minerals) and Mr Lauritz Barnes (Consultant with Trepanier Pty Ltd). The Mineral Resource models were established within wireframes of pegmatite based on geological and structural logging, geochemical assays and pit mapping, with estimates developed using Ordinary Kriging and one-metre composites. • The Mineral Resource is reported inclusive of the in-situ Ore Reserves. The in-situ Ore Reserve considered only the Measured and Indicated Resource portions of the Mineral Resource published on 7 August 2023. • The Ore Reserve is comprised of in-situ Ore Reserves and stockpile Ore Reserves. The in-situ Ore Reserves are a sub-set of the Mineral Resources. The Mineral Resource estimate is not additional to the Ore Reserve estimate. • The Ore Reserve includes stockpiles not included in the Mineral Resource.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Ore Reserve competent person is Mr Ross Jaine (MAusIMM), a full-time employee of Pilbara Minerals. Mr Jaine visits site regularly, and outcomes of these visits include confirmation of operating assumptions and updates to pit design and ore recovery parameters for estimation of the Ore Reserves.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• Pilgangoora is an active operating mine site and carries out processing at two separate plants: Pilgan and Ngungaju. The current Pilgan processing capacity is 2.3Mtpa and has been in operation producing concentrate since 2018. The current Ngungaju processing capacity is 1.3Mtpa, with the Ngungaju plant acquired in January 2021 from Altura and re-commencing full production in October 2022. • A Feasibility Study (FS) to expand the Pilgan plant processing capacity to 3.0Mtpa, known as the 'P680 Project' received the Financial Investment Decision (FID) to proceed in June 2022. Construction of the P680 Project

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		expansion is underway and is currently scheduled for ramp-up commencement in late CY 2023. The FS included mine scheduling demonstrating the P680 Project as technically achievable and economically viable with the mine plan incorporating material modifying factors including dilution and ore loss, spatial boundary and grade constraints, processing recoveries and costs associated with mining, processing, transporting and selling spodumene concentrate product. The P680 Project 3Mtpa Pilgan plant expansion will result in a combined Pilgangoora Operation throughput of 4.3Mtpa. The P680 Project incorporates ore sorting technology into the front end of the Pilgan plant flow sheet to enable processing of ore contaminated with basalt and to improve recovery and concentrate quality. • A further FS to expand the Pilgan plant processing capacity to 5.0Mtpa, known as the P1000 Project received FID to proceed in March 2023. The P1000 Project expansion is underway and is currently scheduled for ramp-up commencement in early CY 2025. The FS included mine scheduling demonstrating the P1000 Project as technically achievable and economically viable with the mine plan incorporating material modifying factors including dilution and ore loss, spatial boundary constraints, processing recoveries and costs associated with mining, processing, transporting and selling spodumene concentrate product. The P1000 Project 5Mtpa Pilgan plant expansion will result in a combined Pilgangoora plant throughput of 6.3Mtpa. • Modifying Factors for both the Pilgan and Ngungaju plants incorporate current operational plant data in addition to FS estimates for the 5Mtpa Pilgan plant expansion and ore sorting resulting in a minimum level of detail for the Modifying Factors used in the preparation of this Ore Reserve estimate at a FS level of assessment.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Ore Reserves are based on a net value economic cut-off calculation combined with a pegmatite % cut-off to define ore. This results in an ore cut-off variable by Li_2O% and Ta_2O_5% grades and is equivalent to an average Li_2O% cut-off grade of approximately 0.3%. The cut-off grade includes the following costs associated with processing and selling lithium and tantalum concentrates: - Ore haulage to process plant

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		- Plant feeding from stockpile - Crushing and processing of ore - Ore sorting at the Pilgan plant - Tailings management - Off-site processing of the Pilgan plant Ta_2O_5 concentrate - 5.7% Li_2O concentrate road transport, port handling, ship loading and seaborne-freight - Selling costs, Government, Native Title and third-party royalties - General overhead and administration costs • For revenue estimates, US$1,450/dmt (CIF price) for 6% Li_2O concentrate, a realised price of US$36.0/lb for 25% Ta_2O_5 equivalent and an exchange rate of 0.75 AUD/USD has been applied. • Process recoveries applied to the cut-off calculation are detailed below under “Metallurgical factors or assumptions”.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*	• Ore Reserves were estimated using industry standard Whittle pit optimization software with the Lerchs-Grossmann algorithm to define pit limits from the resource model after application of ore loss and dilution, ore processing and selling costs, metallurgical recoveries and product grades, revenue, geotechnical inputs, and spatial constraints for lease boundaries, diversion channels, mine abandonment bunds and significant sites, to generate a series of economic pit shells. Selected pit shells were used to develop detailed final pit designs using geotechnical, geometric, access constraints and exclusion zones with revenue factor 1.00 pit shells used for the ultimate pits. • With two operating plants available as destinations for the processing of ore, average weighted costs and recoveries have been applied in the optimisations. • The mining method currently used on site and proposed for continuing future operations at 6.3Mtpa plant feed rates is selective open pit excavation using drill and blast on 5m to 10m benches and load and haul on 2.5m flitches. 100t to 250t class hydraulic excavators in backhoe configuration loading into 100t to 150t class rear dump haul trucks are used to separately mine ore and waste (basalt and ultramafic). Ore contaminated with low to moderate

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	• *The infrastructure requirements of the selected mining methods.*	levels of waste is stockpiled for later processing through the ore sorting facility. Blast hole drilling is by tracked rigs enabling pit access from surface contour to pit bottom. The mining method is considered appropriate for the deposit geometry and production rates and has been in use since commencement of mining in 2017. Access is available to all designed pits, waste dumps and stockpiles and the minimum mining width for pushbacks is 40m. • The pit design parameters to achieve stable walls (as determined by geotechnical assessment of the expected rock domains) are: - For Central and Eastern deposits: 55° batters in weathered and 75° in transitional and fresh rock domains; benches established every 20m maximum with a minimum berm width of 10m; and 20m geotechnical berms every 100m vertical height. - For the Monster deposit: 55° batters in weathered and 70° in fresh rock domains: and benches established every 20m maximum with a minimum berm width of 10m. - For the Lynas Find deposit: 45° batters in weathered and 65° in fresh rock domains; and benches established every 20m maximum with a minimum berm width of 15m. - For the South deposit: 55° batters in weathered and 75° in transitional and fresh rock domains. Benches established every 20m maximum with a minimum berm width of 7.2m; and 15m geotechnical berms every 100m vertical height. • The Mineral Resource model used for the Mineral Resource estimate announced 7 August 2023 was used as an input to the Ore Reserve estimate by conversion to a Mining model using industry standard regularisation or re-blocking to make allowances for ore loss and dilution. The regularisation has resulted in a 17% loss of ore (equivalent to 83% ore recovery) and 5% dilution between the Mineral Resource model and the Mining model overall with the increased ore loss closely matching FY23 Actual production results. • This provision for ore loss and dilution is considered appropriate by the

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		Competent Person reflecting recent FY23 reconciliation results and the selective mining method currently used on site. • Inferred Mineral Resources have been treated as waste rock in pit optimisation, mine design and mine scheduling for the Ore Reserve estimation. • Infrastructure to support the current combined 3.6 Mtpa operations is in place, including haul-roads and facilities for: crushing and processing, maintenance, explosive storage, fuel storage, wash-down, water, power, accommodation, offices and port storage. Additional infrastructure is being progressively established to support the operational ramp-up to 6.3Mtpa processing capacity in parallel to execution of the P680 and P1000 Projects. • The additional processing facilities planned for extraction of the Ore Reserves are detailed under the section Metallurgical factors or assumptions.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The Pilgan 2 Mtpa processing plant has been commercially operational since June 2018. The existing Pilgan plant is being expanded during implementation of the P680 and P1000 Projects to a production capacity of 5.0Mtpa and is planned to be operational in CY 2025. The Pilgan plant currently processes uncontaminated pegmatite ore only, with any ore diluted with basalt currently stockpiled for future processing with the ore sorter. Only fresh and transitional materials are processed, with mineralised oxide considered as waste. An ore sorting facility (part of the P680 Project) is in construction on the front end of the expanded Pilgan Plant to enable processing of this contaminated ore. The Ngungaju Plant capacity is 1.3Mtpa and currently processes uncontaminated pegmatite ore only. There are no current plans for further expansion of the Ngungaju Plant. • The current 2.3Mtpa and the proposed P680 and P1000 Pilgan plant upgrades comprise conventional three-stage crushing, ball milling, hydro-cyclone classifiers, heavy media separation, flotation, magnetic separation, spirals, and concentrate filtration to produce spodumene concentrate and tantalite by-product. • The 1.3Mtpa Ngungaju Plant comprises three-stage crushing, heavy media separation, ball milling, cyclone classification, flotation, magnetic separation

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		and filtration to produce spodumene concentrate only. • The Pilgangoora 30 June 2023 Ore Reserve Estimate incorporates the treatment of ore contaminated with basalt (the principal deleterious element) at the Pilgan plant with the flowsheet addition of ore sorting at primary crushed size fractions. This technology has been successfully implemented in other hard rock spodumene operations and is supported by internal large-scale metallurgical test-work programs with forecast performance characteristics incorporated into the Pilgan concentrator recovery. • The existing Pilgan Plant, the proposed 5 Mtpa Pilgan Plant, the 1.3Mtpa Ngungaju processing plant and the proposed ore sorting facility for the front end of the Pilgan plant all utilise conventional, widely used and well-tested metallurgical techniques and technology common in the industry and in the opinion of the Competent Person, are appropriate for the Pilgangoora deposits. • A life of mine average fixed recovery of 75.0% for Li_2O and 45% for Ta_2O_5 at the Pilgan processing plant was applied in the estimate. A life of mine average fixed recovery of 67.5% for Li_2O at the Ngungaju processing plant was applied in the estimate. The Ngungaju plant does not produce a Ta_2O_5 concentrate. • The Modifying Factors for both processing plants have been informed and are supported by production data from the last 12 months, which show that saleable grades for Li_2O and Ta_2O_5 concentrates are achievable and that the recovery estimates for concentrate are reasonable. • Tailings generated from the processing plants are managed and stored in above ground Tailings Storage Facilities (TSFs) located within the mining leases. The Pilgan and Ngungaju processing plants each have dedicated tailings facilities, being the Pilgan TMF and the Ngungaju TSF respectively. The construction method is downstream integrated with a waste rock landform. • The operation and management of both TSFs adheres to the guidelines, regulations, and codes of practice for Tailings Dams including the Australian National Committee on Large Dams (ANCOLD) guidelines. Pilbara Minerals engages both internal engineering specialist oversight and external

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		engineering support to conduct periodical inspections to ensure proper management of the TSFs is in place. • The current TSFs approved capacity is sufficient for scheduled mine production until approximately 2026 for Pilgan and 2025 for Ngungaju. Pilbara Minerals is currently in the process of developing and establishing new tailings storage facilities on existing Pilbara Minerals' tenements to provide sufficient storage for the remainder of the Ore Reserve.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Two Mining Proposals have been approved by the Department of Mines, Industry Regulation and Safety covering the first 17 years (at 2Mtpa) of operations of the Pilgan Plant and the first 25 years of operations of the Ngungaju Plant, including associated mining activities. • Additional approvals will be required to be sought for developments outside existing approved footprints, and for processing beyond 5Mtpa for the Pilgan Plant and 1.54Mtpa for the Ngungaju Plant. EPBC Act and EP Act Approvals are currently in preparation for the future development of the Lynas Find project. • Development of the additional 55Mt of Ore Reserve may require additional State and Federal level environmental assessment and approvals to be granted. • Appropriate environmental studies were completed over the project areas and no issues were identified that would materially impact the proposed location of pits, infrastructure or waste rock dumps (WRDs) for the first 17 and 25 years of operations respectively. Further environmental approvals will be required for the life of mine footprint including full development of the additional 55Mt of Ore Reserve. • Management of topsoil material including pre-stripping prior to mining and storage for future incremental rehabilitation has been allowed for in this estimate. Soil characterisation reviews and reports have been completed by environmental consultants, which will facilitate further detailed work for ongoing topsoil management. • Sterilisation drilling of some WRL footprints has been undertaken with further programs planned for completion prior to dumping at any proposed locations. To date, no issues have been identified that would materially

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		impact on the proposed locations. • Some WRL designs include provision for the encapsulation and storage of potential acid-forming (PAF) and potentially fibrous material (PFM) with additional waste rock characterization programs and studies ongoing. • Pilbara Minerals has entered into two Native Title Agreements with the Nyamal people to cover the Pilgangoora operations. All proposed project areas fall within the existing Native Title Agreements. • Heritage surveys have been completed for the majority of the additional 55Mt Ore Reserve project areas, and the project has been designed to avoid known heritage sites. Further, more detailed heritage surveys will be undertaken to ensure any additional operational requirements are within completed survey boundaries and sites are either avoided, or necessary consultation undertaken to seek approval to damage heritage sites. • Hydrological and hydrogeological studies have been completed over the Pilgangoora Operations to assess the impact on surface and ground water flows. No significant impacts were identified or expected for the proposed mining operations. • The diversion of Pilgangoora Creek around the Central Pit has been approved under the existing Mining Proposal. An additional diversion will be required for future tailings storage requirements. • All tailings will be stored in an above ground purpose-built TMF until approximately 2035, at which time it is proposed that the Monster Pit will be used for tailings storage, if no other suitable surface storage facilities are identified. No approvals have been sought for in-pit tailings deposition as part of the Pilgan Plant Stage 2 approvals. Alternative tailings deposition areas are currently under review. The Pilgan Plant's TMF and the Ngungaju Plant's TMF have both been completed and are receiving tailings. Storing tailings in the Monster Pit or at an alternative location beyond the already approved lifts will require future approval by the regulators.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly*	• The Pilgangoora Operation is currently accessed via the Wodgina East road, off the Great Northern Highway. Concentrate is hauled approximately 120km by road using road-trains to a Port Hedland storage facility for export to customers.

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	for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• Sufficient land exists to locate proposed infrastructure, TMFs and WRLs required for the Ore Reserve. Studies are in progress to obtain approval for the Lynas Find pits, and for additional waste rock and tailings storage facilities for the remainder of the mine life. • Power is currently generated on site via an independent power provider to meet the needs of the process plant and supporting infrastructure. • Updated water balance projections indicate a high utilisation of the water supply assets over the next 12 months. Planned water exploration activities are expected to increase future water supply beyond the next 12 months to satisfactorily match future demand. • Approval has been granted for the Pilgangoora Creek diversion. • The workforce required for the operation is engaged on a fly-in-fly-out (FIFO) basis with FIFO operations well established within Western Australia. FIFO workers commute between Perth and Wodgina via jet charter flights and are accommodated using the existing fully catered facilities established on site.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• The capital cost estimates for the Pilgan plant are based on the respective FS work undertaken during the P680 and P1000 Project FID process. • Costs for mining, processing and general operating are based on the P1000 FID FS works, which considered past operating costs and production information and have been adjusted where appropriate based on future cost projections. Costs include all applicable government, native title and third-party royalties. • Cost allowances for deleterious elements (primarily waste basalt in feed) associated with mining practices and operation of the P680 ore sorting facility have been incorporated into the operating cost base. • Royalties are based on prices on a Cost, Insurance and Freight (CIF) basis and include state, native title and third party. • For revenue estimates, US$1,450/dmt (CIF price) for 6% Li_2O concentrate, a realised price of US$36.0/lb for 25% Ta_2O_5 equivalent and an exchange rate of 0.75 AUD/USD has been applied. • Lithium concentrate pricing is based on recent consensus broker and independent lithium industry commodity forecasters long term spodumene

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		price forecasts. • Ta_2O_5 concentrate is a minor by-product from the Pilgangoora operation with the revenue contribution from Ta_2O_5 immaterial relative to spodumene concentrate revenues. Ta_2O_5 concentrate and other products have historically been sold on a mine gate basis. The assumed Ta_2O_5 concentrate price reflects historical outcomes achieved by Pilbara Minerals and third-party forecasts for future market prices. • The AUD/USD exchange rate is based on Bloomberg long-term forecasts.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s), exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• For revenue estimates, US$1,450/dmt (CIF price) for 6% Li_2O concentrate, a realised price of US$36.0/lb for 25% Ta_2O_5 equivalent and an exchange rate of 0.75 AUD/USD has been applied. • Ta_2O_5 concentrate is a minor by-product from the Pilgangoora Operation with the revenue contribution from Ta_2O_5 immaterial relative to spodumene concentrate revenues. Ta_2O_5 concentrate and other products have historically been sold on a mine gate basis. The assumed Ta_2O_5 concentrate price reflects historical outcomes achieved by Pilbara Minerals and third-party forecasts for future market prices. • The AUD/USD exchange rate is based on Bloomberg long-term forecasts. • Lithium concentrate pricing is based on recent consensus broker and independent lithium industry commodity forecasters long term spodumene price forecasts.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Pilbara Minerals analyses a wide range of independent market commentators and analyst forecasts for the outlook for supply and demand for both lithium concentrate and lithium chemicals over the period that Pilgangoora is expected to be in operation. • Using in-house marketing expertise, Pilbara Minerals currently markets and manages lithium contracts and concentrate products and specifications for delivery to customers. • The demand for spodumene concentrate and lithium chemicals is largely driven by the demand for electric vehicles and other rechargeable lithium batteries. Lithium is currently considered a staple in many mid and high range electric vehicle battery chemistries.

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		• Lithium concentrate has generally been in deficit over the two years to 30 June 2023, which generated steep price increases and incentives for new supply. There has been some recent softening in concentrate and chemicals prices in CY 2023. It is expected that the market will move into a more balanced position with periods of fluctuation between oversupply and deficits through to the end of the decade as new projects ramp up and electric vehicle demand continues to grow. Beyond the end of the decade through to 2040, a number of commentators including Benchmark Minerals expect a market deficit for lithium concentrates to emerge underpinning the requirement for new lithium operations to be developed including beyond the current identified projects. The accuracy of any forward-looking estimates is limited given these estimates are based on many assumptions and variables which may prove to be incorrect including electric vehicle demand, battery technology developments, future lithium supply and future lithium geological discoveries. • For revenue estimates, US$1,450/dmt (CIF price) for 6% Li_2O concentrate, a realised price of US$36.0/lb for 25% Ta_2O_5 equivalent and an exchange rate of 0.75 AUD/USD has been applied. • Lithium concentrate pricing is based on consensus analyst and independent lithium industry commodity forecaster long term spodumene price forecasts and is materially lower than current lithium concentrate market prices. • Ta_2O_5 concentrate is a minor by-product from the Pilgangoora operation with the revenue contribution from Ta_2O_5 immaterial relative to spodumene concentrate revenues. Ta_2O_5 concentrate and other products have historically been sold on a mine gate basis. The assumed Ta_2O_5 concentrate price reflects historical outcomes achieved by Pilbara and third-party forecasts for future market prices.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Open pit final and stage designs were developed using industry standard Whittle pit optimisation software to define open pit economic limits with the economic, financial and geotechnical inputs described above. • Financial models developed for P680 and P1000 and sensitivity analyses demonstrate significant strong positive robust economics and were used to support and inform the financial investment decisions to proceed.

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		• Additionally, sensitivity analysis to price, grade, recovery, costs (mining, processing and capital), and overall wall angles has been undertaken at levels of +/- 20% using Whittle optimisation software with the results confirming significantly robust economic outcomes, with higher sensitivity to price, grade, recovery and wall angles and with lower sensitivity to costs.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Pilbara Minerals has secured two Native Title Agreements with the registered Native title claimant party (Nyamal) over the Pilgangoora operations project areas. The Native Title Agreements provide direct and indirect benefits to the Nyamal people, including fixed payments, royalty payments, employment and business opportunities. • The Pilgangoora Operations are located approximately 120km south of Port Hedland. • Pilbara Minerals engages extensively with the Traditional Owners of the area encompassing the Pilgangoora Operation the Nyamal People, and the Kariyarra People who are the Traditional Owners of the surrounding area where regional exploration is undertaken and supporting project infrastructure is located. To support these relationships separate agreements are in place with both groups. • Additionally, Pilbara Minerals is an active sponsor and supporter of local community events in this regional centre. • In recognition of the placement of the Pilgan processing plant on the Wallareenya pastoral lease, Pilbara Minerals has entered into an Agreement with the holders of the pastoral lease that allows for ongoing consultation and contracting opportunities. • The proposed project areas will also extend onto the neighbouring Strelley pastoral lease, and an Agreement has been entered into with Strelley to enable this activity. • Pilbara Minerals also maintain active consultation with neighbouring Indigenous communities, pastoral station holders, local governments and mining companies. • The Pilgangoora Operation is located in the Pilbara region of Western Australia, one of the most significant mining regions of the globe.

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		• Pilbara Minerals have not identified or encountered any obstruction to gaining a social license to operate.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study.* • *Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• The current project area is located inside tenements either granted to or under application by Pilbara Minerals via Pilgangoora Operations Pty Ltd (M45/78, M45/333, M45/511, M45/1256 and M45/1266) or acquired by Pilbara Minerals via the Altura acquisition (M45/1230, M45/1231 and M45/1260) in 2021. • Development of the additional 55Mt of Ore Reserve has been identified as requiring mining activity within Exploration Licence tenure currently held by Pilbara Minerals, being E45/2241 and E45/4523. Pilbara Minerals will be required to make application to convert these Exploration Licences to Mining Leases prior to any commencement of activity. • No material naturally occurring risks have been identified. • The Pilgan plant Stage 1 and Stage 2 Projects are currently operating under Mining Proposal 85615, approved by DMIRS on 28_April 2020. • The Ngungaju processing plant and associated area is currently operating under Mining Proposal 86477, approved by DMIRS on 25 May 2020. • For additional future TSF and waste storage requirements, it is expected that all necessary approvals will be received within suitable timeframes and no unresolvable issues for extraction of the Ore Reserves are anticipated. • Pilbara Minerals currently sells its spodumene concentrate through a combination of medium-term and long-term offtake agreements along with spot sales including on the Battery Materials Exchange (BMX) platform. Future production of up to 315,000 dmt per annum is allocated under an offtake agreement to POSCO Pilbara Lithium Solutions (a joint venture between POSCO and Pilbara Minerals) to supply a 43,000 tpa lithium hydroxide chemicals facility that is under construction in South Korea. Supply under this offtake agreement is expected to gradually ramp up during FY24. • Following FID for the P1000 Project, Pilbara Minerals has commenced a strategic partnering process to explore opportunities in downstream lithium conversion using future unallocated spodumene concentrate of up to

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		300,000 tpa from the Pilgangoora Operation. Pilbara Minerals is targeting outcomes from this initiative by the end of CY23. However, at this stage, there is no certainty that any transaction will be announced. If no transaction is announced, further spodumene concentrate would need to be contracted under offtake or sold via the spot market to support production levels.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Only Measured or Indicated Mineral Resources have been converted by application of Modifying Factors to in-situ Ore Reserves. • All Proved in-situ Ore Reserves have been derived from Measured Mineral Resources only. • All Probable in-situ Ore Reserves have been derived from Indicated Mineral Resources only. • All stockpile Ore Reserves have been classified Probable and are not included in the Mineral Resource. • The Ore Reserves consist of 9% Proved Reserves and 91% Probable Reserves. • The Ore Reserve classification into Proved and Probable categories are appropriate in the view of the Competent person.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• The 2023 Ore Reserve estimate was prepared by Pilbara Minerals and included internal peer review with the process including an external independent review that is yet to be completed.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.*	• The Ore Reserves have been completed with a relative accuracy and confidence level consistent with a minimum FS level of assessment. • Factors other than revenue/price and costs that may affect the global tonnages and grade estimates and not covered elsewhere include: geological interpretation; ore recovery including waste levels in contaminated ore stockpiles; mining dilution estimates; and processing performance.

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	Documentation should include assumptions made and the procedures used. • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

APPENDIX 2 – SOURCES FOR FIGURE 1 (RESOURCES BUBBLE CHART – TONNAGE, GRADE, LCE – SORTED BY RESOURCE TONNES)

	Company[1]	Project name	Stage	Location	Announcement title	Announcement date	Total (Mt)	Resource grade (% Li_2O)	Contained Li_2O (Mt)	Contained LCE (Mt)[2]
1	Pilbara Minerals	Pilgangoora	Production	Australia	Substantial Increase to Pilgangoora Mineral Resource to 414Mt	7-Aug-23	414	1.15%	4.8	11.8
2	AVZ Minerals	Manono	Exploration	DRC	Updated Mineral Resource Estimate	24-May-21	401	1.65%	6.6	16.4
3	IGO / Tianqi / Albemarle	Greenbushes	Production	Australia	IGO 2022 Annual Report to Shareholders	30-Aug-22	360	1.50%	5.4	13.4
4	Mineral Resources	Wodgina	Production	Australia	Lithium Mineral Resources and Reserve Update	7-Oct-22	259	1.17%	3.0	7.5
5	Leo Lithium	Goulamina	Development	Africa	Significant Goulamina Mineral Resource upgrade 48% increase to 211Mt	20-Jun-23	211	1.37%	2.9	7.1
6	SQM	Mt Holland	Development	Australia	Mt Holland Technical Report	25-Apr-22	186	1.53%	2.9	7.0
7	Liontown	Kathleen Valley	Development	Australia	Kathleen Valley Lithium Project - DFS Update 2	8-Apr-21	156	1.35%	2.1	5.2
8	Rio Tinto	Jadar	Exploration	Europe	Update to Ore Reserves and Mineral Resources at Jadar	23-Feb-22	144	1.80%	2.6	6.4
9	Infinity Lithium	San Jose	Exploration	Europe	South-West Connect Conference	20-Oct-22	111	0.61%	0.7	1.7
10	Allkem	James Bay	Exploration	North America	James Bay Mineral Resources increased by 173% to 110.2Mt	11-Aug-23	110	1.30%	1.4	3.5
11	Patriot Battery Metals	Corvette	Exploration	North America	Patriot announces the largest lithium pegmatite Resource in the Americas at CV5	30-Jul-23	109	1.4%	1.5	3.8
12	Albemarle	Kings Mountain	Production	North America	2022 Annual Report	14-Feb-23	90	1.24%	1.1	2.8
13	Sigma	Grota do Cirilo	Production	South America	Sigma Lithium Corporate Presentation March 2023	15-Mar-23	86	1.43%	1.2	3.0
14	Andrada	Uis	Exploration	Africa	Drilling Delivers Significant Lithium Resource Upgrade at the Uis Mine	6-Feb-23	81	0.73%	0.6	1.5
15	Prospect	Arcadia	Development	Africa	Staged OFS Investor Presentation	11-Oct-21	73	1.06%	0.8	1.9
16	Sayona	North American Lithium	Production	North America	Definitive Feasibility Study confirms NAL value with A$2.2B NPV	13-Apr-23	58	1.23%	0.7	1.8
17	Livent	Nemaska	Development	North America	NI 43-101 Report on the Estimate to Complete for the Whabouchi Lithium Mine	31-May-19	56	1.40%	0.8	1.9
18	Frontier	Pakeagama Lake	Exploration	North America	Frontier Lithium PFS Demonstrates Pre-Tax NPV US$2.6bn	1-Jun-23	55	1.47%	0.8	2.0
19	Mineral Resources	Mt Marion	Production	Australia	Lithium Mineral Resources and Reserve Update	7-Oct-22	51	1.45%	0.8	1.8
20	Sayona	Moblan	Exploration	North America	Moblan Boosted by Significant Increase in Lithium Resource	17-Apr-23	51	1.31%	0.7	1.7
21	Latin Resources	Salinas	Exploration	South America	241% increase for the Colina Mineral Resource	20-Jun-23	45	1.32%	0.6	1.5
22	Piedmont	Carolina Lithium	Exploration	North America	Piedmont Increases Mineral Resources	22-Oct-21	44	1.08%	0.5	1.2
23	Zinnwald Lithium	Zinnwald	Exploration	Europe	PEA for the revised Zinnwald Lithium Project (NL to FN, Li converted to Li2O using 2.153, it is reported in li PPM)	6-Sep-22	40	0.76%	0.3	0.8
24	Global Lithium	Manna	Exploration	Australia	Manna Lithium Project Resource Grows	26-Jul-23	36	1.13%	0.4	1.0
25	Atlantic Lithium	Ewoyaa	Exploration	Africa	Definitive Feasibility Study Project Update	22-Sep-22	35	1.25%	0.4	1.1
26	Critical Elements	Rose	Exploration	North America	Rose Lithium-Tantalum project feasibility study	13-Jun-22	34	0.90%	0.3	0.8
27	Core Lithium	Finniss	Production	Australia	Significant Increase to Finniss Mineral Resources	18-Apr-23	31	1.31%	0.4	1.0
28	Bikita Minerals	Bikita	Production	Africa	SMM news	18-May-22	29	1.17%	0.3	0.9
29	Savannah	Mina Do Barroso	Exploration	Europe	Annual Report and Financial Statements	31-Dec-21	27	1.06%	0.3	0.7
30	Alita	Bald Hill	Production	Australia	121 Mining Conference Presentation	20-Mar-19	27	0.96%	0.3	0.6
31	CAT Strategic Metals	Kamativi	Exploration	Africa	Chimata Releases NI 43-101 Technical Report on the Kamativi Tailings Lithium Project	7-Nov-18	27	0.58%	0.2	0.4
32	AMG Mineracao	Mibra	Production	South America	AMG Advanced Mettallurgical Group Announces Increased Lithium and Tantalum Mineral Resource at Mibra Mine	3-Mar-17	25	1.05%	0.3	0.6
33	Kodal Minerals	Bougouni	Exploration	Africa	FS demonstrates robust economics for development of the Bougouni Lithium Project	27-Jan-20	21	1.11%	0.2	0.6
34	Premier African Minerals	Zulu	Development	Africa	Africa's Next Lithium Developer	20-Jun-21	20	1.06%	0.2	0.5
35	Keliber Oy	Keliber	Development	Europe	Mineral Resources from Keliber's New Tuoreetsaaret Lithium Deposit	23-Jun-22	17	1.02%	0.2	0.4
36	Sayona	Authier	Production	North America	Definitive Feasibility Study confirms NAL value with A$2.2B NPV	13-Apr-23	17	1.01%	0.2	0.4
37	Liontown	Buldania	Exploration	Australia	Annual Report to Shareholders	30-Sep-22	15	1.00%	0.2	0.4
38	Rock Tech Lithium	Georgia Lake	Exploration	North America	Georgia Lake Pre-Feasibility Study	1-Oct-22	15	0.91%	0.1	0.3
39	Allkem	Mt Cattlin	Production	Australia	Mt Cattlin Resource Upgrade with Higher Grade	17-Apr-23	13	1.30%	0.2	0.4
40	Delta Lithium	Mt Ida	Exploration	Australia	Maiden Lithium Mineral Resource Estimate at Mt Ida	19-Oct-22	13	1.20%	0.2	0.4
41	European Lithium	Wolfsberg	Exploration	Europe	EUR Merger with NASDAQ Corp	26-Oct-22	13	1.00%	0.1	0.3

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42	Lepidico	Karibib	Development	Africa	Helikon 4 & Rubicon Stockpiles Upgrade to Mineral Resources	30-Jan-23	12	0.46%	0.1	0.1
43	Essential Metals	Dome North	Exploration	Australia	Dome North Resource Upgrade	20-Dec-22	11	1.16%	0.1	0.3
44	Snow Lake Resources	Thompson Brothers	Exploration	North America	Annual Report to Shareholders	1-Nov-22	11	1.00%	0.1	0.3
45	Avalon	Separation Rapids	Exploration	North America	NI 43-101 Separation Rapids Lithium Deposit	26-Sep-18	10	1.40%	0.1	0.4
46	Green Technology	Seymour	Exploration	North America	Investor Presentation South - West Connect Conference	20-Oct-22	10	1.04%	0.1	0.3
47	Green Technology	Root	Exploration	North America	Maiden Mineral Resource Estimate for the Root Project	19-Apr-23	5	1.01%	0.1	0.1

Source: Company filings as at 31 July 2023. Note: Figures are rounded. Reported on a 100% asset basis. Sorted by Resource Tonnes. Company reporting the Mineral Resource is disclosed; Li2O converted to LCE using a factor of 2.473. Manono Project excluded from the bubble chart in Figure 1.

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APPENDIX 3 – Pilgangoora Operation – Mineral Resource Breakdown by Area

Area	Category	Tonnes (Mt)	Li_2O (%)	Ta_2O_5 (ppm)	Fe_2O_3 (%)	Li_2O (t)	Ta_2O_5 (M lb)
Central	**Measured**	10.2	1.41	126	0.37	144,000	2.9
	Indicated	131.8	1.28	101	0.52	1,682,000	29.3
	Inferred	20.1	1.30	104	0.57	262,000	4.6
	Combined	162.2	1.29	103	0.52	2,088,000	36.8
Eastern	**Measured**	5.9	1.37	231	0.48	82,000	3.0
	Indicated	43.4	1.27	216	0.56	550,000	20.7
	Inferred	24.9	1.30	195	0.44	323,000	10.7
	Combined	74.2	1.29	210	0.52	955,000	34.4
Far East	**Measured**	-	-	-	-	-	-
	Indicated	8.1	1.36	94	0.61	109,000	1.7
	Inferred	0.5	1.16	67	0.84	6,000	0.1
	Combined	8.6	1.34	93	0.62	115,000	1.8
South	**Measured**	4.4	1.12	81	0.56	49,000	0.8
	Indicated	104.3	0.97	70	0.52	1,016,000	16.0
	Inferred	18.3	0.64	63	0.56	116,000	2.5
	Combined	127.0	0.93	69	0.52	1,182,000	19.3
South End	**Measured**	-	-	-	-	-	-
	Indicated	10.0	0.89	74	0.50	89,000	1.6
	Inferred	0.7	0.52	71	0.32	4,000	0.1
	Combined	10.7	0.87	74	0.49	93,000	1.7
West	**Measured**	-	-	-	-	-	-
	Indicated	5.8	0.74	112	0.73	43,000	1.4
	Inferred	4.4	0.77	109	0.81	34,000	1.1
	Combined	10.2	0.75	111	0.76	77,000	2.5
Monster	**Measured**	1.6	1.40	135	0.49	22,000	0.5
	Indicated	6.6	1.24	136	0.52	82,000	2.0
	Inferred	5.3	0.93	117	0.56	49,000	1.4
	Combined	13.5	1.14	129	0.53	153,000	3.8
Pilgangoora Sub-Total	**Measured**	22.1	1.34	146	0.44	297,000	7.1
	Indicated	310.0	1.15	106	0.53	3,571,000	72.7
	Inferred	74.2	1.07	125	0.54	794,000	20.4
	Combined	406.3	1.15	112	0.53	4,662,000	100.3
Lynas Find	**Measured**	-	-	-	-	-	-
	Indicated	5.1	1.31	89	0.61	67,000	1.0
	Inferred	2.4	0.98	100	0.74	23,000	0.5
	Combined	7.5	1.21	93	0.65	91,000	1.5
Total	**Measured**	22.1	1.34	146	0.44	297,000	7.1
	Indicated	315.2	1.15	106	0.53	3,639,000	73.7
	Inferred	76.6	1.07	124	0.54	817,000	21.0
	Combined	413.8	1.15	112	0.53	4,753,000	101.8

Note: Appropriate rounding applied to numbers above.